

Agenda Summary Report (ASR)

Franklin County Board of Commissioners

DATE SUBMITTED: January 20, 2023	PREPARED BY: Aaron Gunderson
Meeting Date Requested: January 31, 2023	PRESENTED BY: Derrick Braaten
ITEM: (Select One) <input type="checkbox"/> Consent Agenda <input checked="" type="checkbox"/> Brought Before the Board Time needed: 10 minutes	
SUBJECT: Closed Record Public Hearing (Quasi-Judicial Item) - A Conditional Use Permit (CUP) to allow for the construction of the Pasco Resource Recovery Center. (File # CUP 2022-10 and SEPA 2022-29)	
FISCAL IMPACT: NA, this is a land-use item; the applicant is responsible for any fiscal impact.	
BACKGROUND: Allow for the expansion of the City of Pasco's Process Water Reuse Facility (PWRF). Expansion consists of three (3) phases. This proposal is for phase 2 of the project, which is the provision of additional winter storage through proposed lagoons on City-owned and Bureau of Reclamation-owned parcels, and establishes a construction site for future pretreatment.	
RECOMMENDATION: The County Building and Planning Department staff provided the Planning Commission with a written recommendation of approval for the application. Subsequently, at their meeting on January 10, 2023, the Planning Commission held a duly advertised open-record public hearing and unanimously passed a motion (5-0) to forward a recommendation of approval, based on six findings of fact and with ten suggested conditions of approval. There were no appeals. Per FCC 17.82.110, the board can pass a resolution to take action without further review (a draft proposed resolution is attached) or the board can schedule a future closed record appeal hearing. <u>Suggested Motion:</u> Pass Resolution #_____, granting approval of CUP 2022-10, based on the six findings of fact and subject to ten conditions of approval.	
COORDINATION: The Conditional Use Permit application was advertised to the public via procedures outlined in the Optional DNS process (WAC 197-11-355), and agencies were contacted for review and comment; a SEPA MDNS was issued after the Planning Commission meeting. The County Planning Commission, after an open record public hearing and consideration on CUP 2022-10 recommended approval of the CUP, with six findings of fact and subject to ten conditions of approval.	
ATTACHMENTS: (Documents you are submitting to the Board) (1) Draft Resolution (2) Staff Report to the Planning Commission including attachments (3) Draft Planning Commission Minutes	
HANDLING / ROUTING: (Once document is fully executed it will be imported into Document Manager. Please list <u>name(s)</u> of parties that will need a pdf) To the Clerk of the Board: 1 Original Resolution To Planning: 1 Copy Resolution	

I certify the above information is accurate and complete.

 Derrick Braaten

FRANKLIN COUNTY RESOLUTION _____
BEFORE THE BOARD OF COUNTY COMMISSIONERS OF
FRANKLIN COUNTY, WASHINGTON

Conditional Use Permit (CUP) 2022-10 to allow for expansion of the Process Water Reuse Facility (PWRP)

WHEREAS, on January 31, 2023, the Board of Franklin County Commissioners, via public meeting, considered the positive recommendation of the Franklin County Planning Commission to grant a conditional use permit for the proposed use under file CUP 2022-10; and

WHEREAS, at the public meeting the Board has found that the County Planning Commission, after an open record public hearing and consideration on **CUP 2022-10** did recommend approval of the Conditional Use Permit with six findings of fact and ten conditions of approval; and

WHEREAS, there were no appeals filed; and

WHEREAS, it appears to be in the public use and interest to approve the conditional use permit.

NOW, THEREFORE, BE IT RESOLVED that CUP 2022-10 is hereby approved in accordance with the provisions of the Franklin County Development Regulations and as recommended by the Planning Commission.

APPROVED THIS 31st DAY OF JANUARY, 2023.

BOARD OF COUNTY COMMISSIONERS
FRANKLIN COUNTY, WASHINGTON

Chair

Chair Pro-Tem

Attest: _____
Clerk of the Board

Member

FRANKLIN COUNTY BOARD OF COMMISSIONERS

CONDITIONAL USE PERMIT # 2022-10

RESOLUTION NUMBER _____

The following Conditional Use Permit is granted, in accordance with the provisions of the Development Regulations of Franklin County, and according to the motion passed by the Franklin County Board of Commissions on January 31, 2023.

APPLICANT: Alicia Pettibone, C/O RH2 Engineering, Inc., 22722 29th Dr. SE, STE 210
Bothell, WA 98021

LEGAL DESCRIPTION: LOTS 3 & 4 & N2SW4 4-9-30

NON-LEGAL DESCRIPTION: This parcel currently has no address (Parcel #113-090-058). Property is located East of HWY 395, North of E. Foster Wells Rd., and West of Blasdel Rd.

SEPA REVIEW: A SEPA Checklist was submitted with the CUP application. Planning Staff [*Lead Agency Responsible Official*] reviewed the checklist and issued a Notice of Application as part of the Optional Determination of Non-Significance (ODNS) on December 15, 2022 under WAC 197-11-355. Comments on the ODNS were due by December 29, 2022 and no SPEA specific comments or appeals were received.

CONDITIONAL USE DESCRIPTION: This is a Conditional Use Permit application to allow for expansion of the City of Pasco's Process Water Reuse Facility (PWRF). This proposal is for phase 2 of the project, which is the provision of additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment.

An attached site plan (Exhibit A) shows the location of the following features:

- Location of six lagoon ponds in total, located to the north and south of existing PWRF facility.
- Power and water supply lines.
- Future process water pump station.
- 14 ft. wide access road.

FRANKLIN COUNTY BOARD OF COMMISSIONERS

CONDITIONAL USE PERMIT # 2022-10

RESOLUTION NUMBER _____

FINDINGS OF FACT AND CONDITIONS OF APPROVAL:

Findings of Fact:

1. The proposed use in the AP-20 Zoning District **IS** in accordance with goals and policies of the County Development Regulations (Zoning) and the applicable Comprehensive Plan.
 - a. The Franklin County Comprehensive Plan classifies the land as Agricultural.
 - b. The County Zoning map designates the land as Agricultural Production 20 (AP-20).
 - c. The applicant has applied for a Conditional Use Permit to allow the proposed use.
2. The proposal **WILL NOT** adversely affect public infrastructure.
 - a. Access to the parcel will be from East Foster Wells Road.
 - b. Public Works has determined that the proposed use would not have a significant impact on the County Road System.
3. The proposal **WILL BE** constructed, maintained, and operated to be in harmony with the existing or intended character of the general vicinity.
 - a. The existing character of the immediate area consists of farms, open space, existing sewer treatment plant and large-lot, residential homes.
 - b. The existing and intended character of the immediate area is Agricultural. The site is within the Agricultural area as designated by the Franklin County Comprehensive Plan.
 - c. The zoning of the site and most of the parcels near the site is either AP-20 or RR-5.
4. The location and height of the proposed structures and site design **WILL NOT** discourage the development of permitted uses on property in the general vicinity or impair the value thereof.
 - a. The proposed facility is in conformance with, and integrated with, the existing PWWR facility located nearby.
 - b. The additional storage lagoons are intended to provide an increase in capacity to support increases in the treatment of irrigation and processing facilities water used

FRANKLIN COUNTY BOARD OF COMMISSIONERS

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due to expanded agricultural production and processing activities in the immediate area.

5. The operation in connection with the proposal **WILL NOT** be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district.
 - a. There are already existing lagoons located near the proposed expansion.
 - b. The proposed lagoons are primarily for winter storage, pending seasonal application of the water, after treatment, to surrounding agricultural uses during the warmer months.
 - c. The proposed facility's operations will have limited, if any, negative impact to the County's transportation infrastructure.
6. The proposal **WILL NOT** endanger the public health, safety, or general welfare if located where proposed.
 - a. The project is subject to the County's Right to Farm ordinance.
 - b. The public was notified of this proposal in accordance with all guidelines and requirements, and the Planning Department received no written comments from the public.

Conditions of Approval:

1. The project shall comply with the requirements and recommendations of the **Franklin County Planning and Building Department:**
 - a. Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with local air-quality requirements. Vegetative cover or a tackifier shall be provided as soon as practicable following clearing and grading. Dust control shall comply with applicable local standards.
 - b. Should archaeological materials (e.g., bones, shell, beads, ceramics, old bottles, hearths, etc.) or human remains be observed during project activities, all work in the immediate vicinity shall stop. The State Department of Archaeology and Historic Preservation (360-586-3065), the Franklin County Planning and Building Department, the affected Tribes – the Yakima Tribe and the Colville Confederation of Tribes, at a minimum – and the County Coroner (if applicable) shall be contacted immediately in order to assess the situation and determine how to preserve the resource(s).

FRANKLIN COUNTY BOARD OF COMMISSIONERS

CONDITIONAL USE PERMIT # 2022-10

RESOLUTION NUMBER _____

Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) is required.

- c. Application for Franklin County Building Permit shall be submitted for fencing and structures.
 - d. Applicant will need to comply with any other Local, State and Federal regulations pertaining to this development.
2. The project shall comply with the requirements and recommendations of the **Franklin County Public Works Department:**
- a. An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
 - b. Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).
3. **RIGHT TO FARM:** Applicant shall be aware that this facility is located in an area where farming and farm operations exist. Further, to assist in preserving the right of farmers to operate utilizing accepted and appropriate practices, the County has adopted a Franklin County Right to Farm Ordinance, as amended. At no time shall a farm operation or accessory farm related enterprise, such as crop dusting operation or airstrip use, be deemed to be a public or private nuisance as it relates to the activities associated with this land use approval.
4. Shall comply with **fire code** requirements as stated in Franklin County Chapter 8.40.
5. The site shall be maintained at all times so as to not let the land become a fire hazard or accumulate with debris, weeds and/or garbage.
6. Future expansions and improvements at the site shall comply with the submitted and approved site plans (and any building plans submitted and approved). To allow future flexibility, changes to the plans which are determined to be minor or incidental may be done administratively by the Planning Department. Major changes, which do not meet the intent of, or seriously re-align, the approved plans, shall be reviewed by the Planning Commission through a new Conditional Use Permit process prior to that change occurring.

FRANKLIN COUNTY BOARD OF COMMISSIONERS

CONDITIONAL USE PERMIT # 2022-10

RESOLUTION NUMBER _____

7. Nothing in this CUP approval shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances, or regulations applicable to this project.
8. In accordance with the County's Zoning Code, any special permit may be reviewed for potential termination and revocation by the Board of Commissioners if, after a public hearing, it is found that the conditions upon which the special permit was authorized have not been fulfilled or if the use authorized has changed in size, scope, nature or intensity so as to become a detriment to the surrounding area. The decision of the Board is final.
9. This permit applies to the described lands and shall run with the land. Any transferring of this permit to another party will require that notice be provided to the Franklin County Planning Department and Board of County Commissioners. It cannot be transferred to another site.
10. By accepting the issuance of this permit, the Permit Holder(s) agree(s) to accept full responsibility for any and all operations conducted or negligence occurring at this location and any incidents that occur on surrounding properties caused by operations or negligence at this location; Permit Holder(s) further agree(s) to indemnify and hold the County harmless and agree that the County is in no way negligent in relation to granting this permit, or operations or negligence that occur at this location or on surrounding properties caused by operations or negligence on this property; Permit Holder(s) further agree(s) to accept full responsibility for any future cleanup needed due to activities conducted at this location that impact the surrounding properties, and obtaining and retaining appropriate insurance coverage.

This Conditional Use Permit is issued this 31st day of January, 2023.

**BOARD OF COUNTY COMMISSIONERS
FRANKLIN COUNTY, WASHINGTON**

Attest: _____

Clerk of the Board

Chair

Original to County Commissioners

Duplicate to File

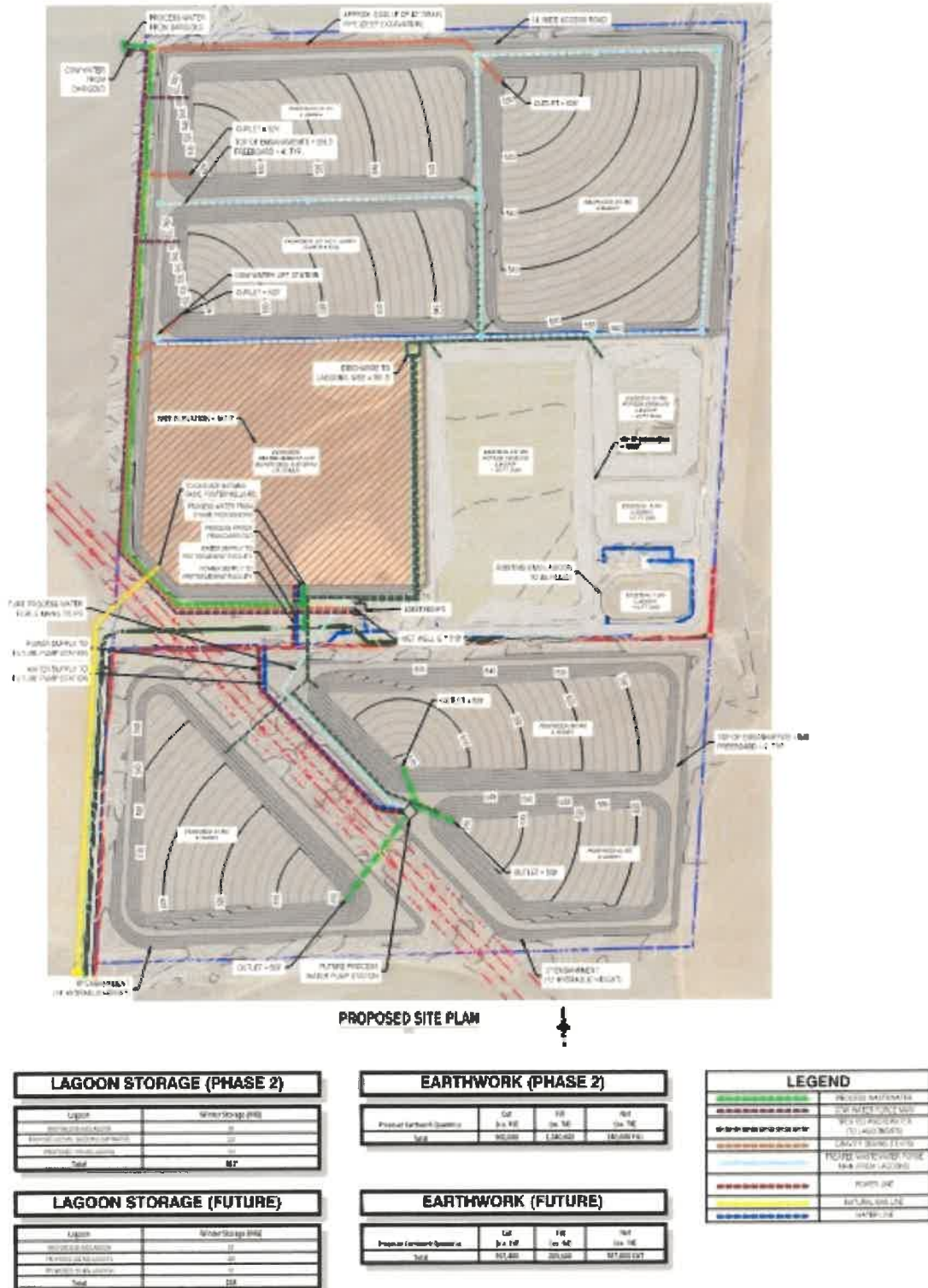
Duplicate to Applicant

Duplicate to be Filed with Auditor

FRANKLIN COUNTY BOARD OF COMMISSIONERS
CONDITIONAL USE PERMIT # 2022-10
RESOLUTION NUMBER _____

EXHIBIT A: PROPOSED SITE PLAN

Figure 3. PWRF Improvements Conceptual Proposed Site Plan (Phases 2, 3 and Future Expansion)



BoCC PROJECT SUMMARY

CUP 2022-10

RH2 Engineering, Inc. – Process Water Reuse Facility

FACT SHEET/STAFF SUMMARY
Meeting before the Franklin County Planning Commission

THIS IS A QUASI-JUDICIAL ACTION
PLEASE AVOID, AND DISCLOSE, ANY EX-PARTE COMMUNICATIONS (CH 42.36 RCW)

Case file: CUP 2022-10 (Conditional Use Permit) and SEPA 2022-29

PC Meeting Date: January 10, 2023

See the staff report for the application details, description, explanation of public notice, etc.

SUMMARY OF THE PUBLIC HEARING:

The proposal for major adjustment to previously approved feedlot under file CUP 2022-10 was presented by Staff at an open record public hearing (special Planning Commission meeting) on January 10, 2023. Planning Commission provided opportunity for the applicant to speak, to which they spoke in support of the project.

Findings of Fact Criteria Used by Planning Commission: The Planning Commission made and entered findings from the record and conclusions thereof as to whether or not:

1. The proposal is in accordance with the goals, policies, objectives, maps and/or narrative text of the comprehensive plan;
2. The proposal will adversely affect public infrastructure;
3. The proposal will be constructed, maintained and operated to be in harmony with the existing or intended character of the general vicinity;
4. The location and height of proposed structures and the site design will discourage the development of permitted uses on property in the general vicinity or impair the value thereof;
5. The operation in connection with the proposal will be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district;
6. The proposal will endanger the public health or safety if located and developed where proposed, or in any way will become a nuisance to uses permitted in the district.

At the January 10th meeting, the Planning Commission discussed the proposal, the comments made, the record as provided, and findings of fact. A motion was made for a recommendation of approval to the Franklin County Board of Commissioners for Application CUP 2022-10, with the findings of fact and conditions of approval (as provided below).

Findings of Fact – Planning Commission: The Planning Commission (with assistance from Planning Staff) made and entered the following findings from the record, and conclusions thereof:

1. The proposed use in the AP-20 Zoning District **IS** in accordance with goals and policies of the County Development Regulations (Zoning) and the applicable Comprehensive Plan.
 - a. The Franklin County Comprehensive Plan classifies the land as Agricultural.
 - b. The County Zoning map designates the land as Agricultural Production 20 (AP-20).
 - c. The applicant has applied for a Conditional Use Permit to allow the proposed use.
2. The proposal **WILL NOT** adversely affect public infrastructure.
 - a. Access to the parcel will be from East Foster Wells Road.
 - b. Public Works has determined that the proposed use would not have a significant impact on the County Road System.
3. The proposal **WILL BE** constructed, maintained, and operated to be in harmony with the existing or intended character of the general vicinity.
 - a. The existing character of the immediate area consists of farms, open space, existing wastewater treatment plant and large-lot, residential homes.
 - b. The existing and intended character of the immediate area is Agricultural. The site is within the Agricultural area as designated by the Franklin County Comprehensive Plan.
 - c. The zoning of the site and most of the parcels near the site is either AP-20 or RR-5.
4. The location and height of the proposed structures and site design **WILL NOT** discourage the development of permitted uses on property in the general vicinity or impair the value thereof.
 - a. The proposed facility is in conformance with, and integrated with, the existing PWWR facility located nearby.
 - b. The additional storage lagoons are intended to provide an increase in capacity to support increases in the treatment of irrigation and processing facilities water used due to expanded agricultural production and processing activities in the immediate area.
5. The operation in connection with the proposal **WILL NOT** be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district.
 - a. There are already existing lagoons located near the proposed expansion.

- c. The proposed lagoons are primarily for winter storage, pending seasonal application of the water, after treatment, to surrounding agricultural uses during the warmer months.
 - d. The proposed facility's operations will have limited, if any, negative impact to the County's transportation infrastructure.
6. The proposal **WILL NOT** endanger the public health, safety, or general welfare if located where proposed.
- a. The project is subject to the County's Right to Farm ordinance.
 - b. The public was notified of this proposal in accordance with all guidelines and requirements, and the Planning Department received no written comments from the public.

Suggested Conditions of Approval:

1. The project shall comply with the requirements and recommendations of the **Franklin County Planning and Building Department**:
 - a. Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with local air-quality requirements. Vegetative cover or a tackifier shall be provided as soon as practicable following clearing and grading. Dust control shall comply with applicable local standards.
 - b. Should archaeological materials (e.g., bones, shell, beads, ceramics, old bottles, hearths, etc.) or human remains be observed during project activities, all work in the immediate vicinity shall stop. The State Department of Archaeology and Historic Preservation (360-586-3065), the Franklin County Planning and Building Department, the affected Tribes – the Yakima Tribe and the Colville Confederation of Tribes, at a minimum – and the County Coroner (if applicable) shall be contacted immediately in order to assess the situation and determine how to preserve the resource(s). Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) is required.
 - c. Application for Franklin County Building Permit shall be submitted for fencing and structures.
 - d. Applicant will need to comply with any other Local, State and Federal regulations pertaining to this development.
2. The project shall comply with the requirements and recommendations of the **Franklin County Public Works Department**:
 - a. An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).

- b. Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).
3. **RIGHT TO FARM:** Applicant shall be aware that this facility is located in an area where farming and farm operations exist. Further, to assist in preserving the right of farmers to operate utilizing accepted and appropriate practices, the County has adopted a Franklin County Right to Farm Ordinance, as amended. At no time shall a farm operation or accessory farm related enterprise, such as crop dusting operation or airstrip use, be deemed to be a public or private nuisance as it relates to the activities associated with this land use approval.
4. Shall comply with **fire code** requirements as stated in Franklin County Chapter 8.40.
5. The site shall be maintained at all times so as to not let the land become a fire hazard or accumulate with debris, weeds and/or garbage.
6. Future expansions and improvements at the site shall comply with the submitted and approved site plans (and any building plans submitted and approved). To allow future flexibility, changes to the plans which are determined to be minor or incidental may be done administratively by the Planning Department. Major changes, which do not meet the intent of, or seriously re-align, the approved plans, shall be reviewed by the Planning Commission through a new Conditional Use Permit process prior to that change occurring.
7. Nothing in this CUP approval shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances, or regulations applicable to this project.
8. In accordance with the County's Zoning Code, any special permit may be reviewed for potential termination and revocation by the Board of Commissioners if, after a public hearing, it is found that the conditions upon which the special permit was authorized have not been fulfilled or if the use authorized has changed in size, scope, nature or intensity so as to become a detriment to the surrounding area. The decision of the Board is final.
9. This permit applies to the described lands and shall run with the land. Any transferring of this permit to another party will require that notice be provided to the Franklin County Planning Department and Board of County Commissioners. It cannot be transferred to another site.
10. By accepting the issuance of this permit, the Permit Holder(s) agree(s) to accept full responsibility for any and all operations conducted or negligence occurring at this location and any incidents that occur on surrounding properties caused by operations or negligence at this location; Permit Holder(s) further agree(s) to indemnify and hold the County harmless and agree that the County is in no way negligent in relation to granting this permit, or operations or negligence that occur at this location or on surrounding properties caused by operations or negligence on this property; Permit Holder(s) further agree(s) to accept full responsibility for any future cleanup needed due to activities conducted at this location that impact the surrounding properties, and obtaining and retaining appropriate insurance coverage.

Suggested Motion: "I move that the Board of County Commissioners adopt the recommendation of the Planning Commission and approve CUP 2022-10, based upon the written findings of fact and conditions of approval."

**PC MEETING MINUTES
POWERPOINT PRESENTATION**

CUP 2022-10

RH2 Engineering, Inc. – Process Water Reuse Facility

ITEM UNDER REVIEW FROM JANUARY 10TH PC MEETING**ITEM #1 – CUP 2022-10/SEPA 2022-29**

Proposal is for the expansion of the City of Pasco's Process Water Reuse Facility (PWRF). Expansion consists of three (3) phases. This proposal is for phase 2 of the project, Which is the provision of additional water storage through proposed lagoons on city-owned and reclamation-owned parcels, and establishes a construction site for future pretreatment.

REPRESENTATIVE: Maria Serra, City of Pasco Assistant Director of Public Works

OWNER: City of Pasco

APPLICANT: RH2 Engineering, Inc.

OPEN PUBLIC HEARING:

Commissioner Vincent opened the public hearing at 6:42 PM.

STAFF REPORT:

- Mr. Braaten presented the staff report at 6:53 PM (there was delay due to technical difficulties). Presentation lasted approximately 12 minutes.

COMMISSIONER QUESTIONS FOR STAFF:

- Commissioner Vincent had a general question about the building permit review process. Mr. Braaten responded to his question.

APPLICANT/REPRESENTATIVE PRESENTATION:

- Ms. Serra spoke in regards to the agenda item. Spoke for approximately four (4) minutes.

COMMISSIONER QUESTIONS FOR APPLICANT:

- No questions from the Commissioners to the Applicant.

PUBLIC COMMENTS:

- No public comments were made for, against, or neutral for this agenda item.

STAFF FINAL COMMENTS:

- No final comments were made by staff for this agenda item.

CLARIFICATION OF STATEMENTS:

- No clarification of statements were needed by the Planning Commission.

CLOSING PUBLIC HEARING ITEM:

- Commissioner Vincent closed the public hearing portion of this item at 7:11 PM.

PLANNING COMMISSION DISCUSSION (before motion):

- No discussion amongst the Planning Commission prior to the motion.

Commissioner Kniveton made a motion to forward to the Board of County Commissioners a positive recommendation of CUP 2022-10/SEPA 2022-29 with the six (6) adopted findings of fact and the ten (10) conditions of approval.

Commissioner Gutierrez seconded the motion.

ITEM UNDER REVIEW FROM JANUARY 10TH PC MEETING**PLANNING COMMISSION FURTHER DISCUSSION (after motion):**

- No further discussion amongst the Commissioners after the motion was made.

ROLL CALL VOTE:

Mike Corrales:	Absent
Melinda Didier:	Absent
Mike Vincent:	Yes
Layton Lowe:	Yes
Peter Harpster:	Yes
Manny Gutierrez:	Yes
Stacy Kniveton:	Yes

The motion has been approved for CUP 2022-10/SEPA 2022-29 at 7:14 PM.

The remainder of the meeting minutes are being EXCLUDED, as the next part of the meeting addressed an item will go to the Board of County Commissioners at a future date, which is subject to the state Appearance of Fairness Doctrine.

AGENDA ITEM # 1

CUP 2022-10

CONDITIONAL USE PERMIT

RH2 ENGINEERING INC.



FRANKLIN COUNTY PLANNING COMMISSION
Tuesday, January 10, 2023

CUP 2022-10

DESCRIPTION



- ☐ **Address:** No assigned situs address.
- ☐ **Parcel Number:** 113-090-058
- ☐ **Zoning:** Agricultural Production 20 (AP-20)
- ☐ **Comp. Plan:** Agricultural
- ☐ **Property size:** Approximately 164.68 acres.

CUP 2022-10

DESCRIPTION

- **Location:** East of U.S. Highway 395, North of East Foster Wells Road, and West of Blasdel Road.
- **Request:** Allow for the expansion of the City of Pasco's Water Reuse Facility (PWRF).
 - Expansion consists of three (3) phases.
 - This proposal is for Phase 2 of the project, which is the provision of additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment.
- **Area to be Used:** Approximately 70 acres of the north half of the property, with additional expansion of the south half at a future date.

CUP 2022-10

DESCRIPTION

☐ Site Plan Features:

- ☐ Location of six (6) lagoon ponds, located to the north and south of existing facility.
- ☐ Power and water supply lines
- ☐ Future process water pump station
- ☐ 14 ft. wide access road

CUP 2022-10

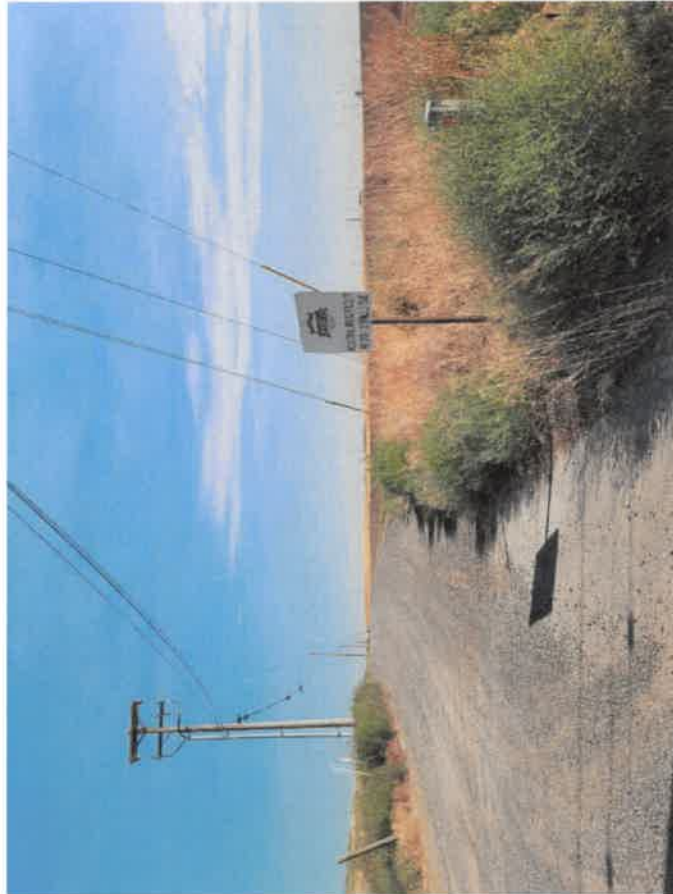
VICINITY MAP

SUBJECT AREA



CUP 2022-10

SITE PHOTOS



CUP 2022-10

AGENCY / PUBLIC NOTICE

- On, or about, Dec. 15, 2022 staff sent notices to:
 - Technical agencies
 - Property owners within one (1) mile
 - The Franklin County Graphic
 - La Voz Spanish Newspaper
- Staff also:
 - Posted a “Pending Land Use Action” sign on the property on Dec. 27, 2022
 - Made a SEPA Optional Determination of Non-Significance (Optional DNS)
 - SEPA Registry # 202206121

CUP 2022-10

AGENCY COMMENTS

☐ **Franklin County Public Works:**

- ☐ An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
- ☐ Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodations of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).

- ☐ **WA Dept. of Ecology:** See submitted letter for comments.

CUP 2022-10

STAFF ANALYSIS

- The proposal is Phase 2 of the three-phase expansion of the City of Pasco's Process Water Reuse Facility (PWRF).
- Phase 3 of the project has already been approved through CUP 2022-08, which consists of the construction of the Pasco Resource Recovery Center (PRRC).
- This phase will provide additional winter storage to the PWRF, through proposed lagoons on Bureau of Reclamation land (Parcel # 113-090-058) located to the north and south of the current PWRF facility.

CUP 2022-10

STAFF ANALYSIS

- Approximately 70 of the total 80 acres of the northern half of the property are to be used for the lagoons, with additional acreage on the south half to be used for lagoons at a future date.
- Staff recommends approval of the proposal based upon review of utilities goals and policies contained within the Franklin County Comprehensive Plan, along with review of the Franklin County Code.
- The project will be a net benefit due to the increased ability of the facility to meet various state environmental standards.

CUP 2022-10

RECOMMENDED FINDINGS OF FACT

1. The proposed use in the AP-20 Zoning District **IS** in accordance with goals and policies of the County Development Regulations (Zoning) and the applicable Comprehensive Plan.
2. The proposal **WILL NOT** adversely affect public infrastructure.

CUP 2022-10

RECOMMENDED FINDINGS OF FACT

3. The proposal **WILL BE** constructed, maintained, and operated to be in harmony with the existing or intended character of the general vicinity.
4. The location and height of the structure and site design **WILL NOT** discourage the development of permitted uses on property in the general vicinity or impair the value thereof.

CUP 2022-10

RECOMMENDED FINDINGS OF FACT

5. The operation in connection with the proposal **WILL NOT** be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district.
6. The proposal **WILL NOT** endanger the public health, safety, or general welfare if located where proposed.

CUP 2022-10

CONDITIONS OF APPROVAL

In addition to “standard” CUP language:

1. The project shall comply with the requirements and recommendations of the Franklin County Planning Department:
 - a. Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with local air-quality requirements. Vegetative cover or a tackifier shall be provided as soon as practicable following clearing and grading. Dust control shall comply with applicable local standards.
 - b. Should archaeological materials (e.g. bones, shells, beads, ceramics, old bottles, hearths, etc.) or human remains be observed during project activities, all work in the immediate vicinity shall stop. The State Department of Archaeology and Historic Preservation (360-586-3065), the Franklin County Planning and Building Department, the affected Tribe(s), and the County Coroner (if applicable) shall be contacted immediately in order to assess the situation and determine how to preserve the resource(s). Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44, and WAC 58-48) is required.

CUP 2022-10

CONDITIONS OF APPROVAL

2. The project shall comply with the requirements and recommendations of the Franklin County Public Works Department:
 - a. An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, and minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
 - b. Any utility extension crossing Franklin County Roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).

CUP 2022-10

SUGGESTED MOTION



- “I move that the Franklin County Planning Commission recommend that the Board of County Commissioners **adopt** the **6** findings of fact and **10** conditions of approval, detailed in the staff report, and **APPROVE** case-file

CUP 2022-10 / SEPA 2022-29.”

PC PACKET

CUP 2022-10

RH2 Engineering, Inc. – Process Water Reuse Facility

Agenda Item #1

STAFF REPORT

CUP 2022-10

RH2 Engineering, Inc. – Process Water Reuse Facility

FACT SHEET/STAFF REVIEW

January 31, 2023 BoCC Meeting
Page 28 of 270

Hearing before the Franklin County Planning Commission

NOTE TO PLANNING COMMISSIONERS:
THIS IS A QUASI-JUDICIAL PUBLIC HEARING
PLEASE AVOID, AND DISCLOSE, ANY EX-PARTE COMMUNICATIONS (CH 42.36 RCW)

Case file: CUP 2022-10 (Conditional Use Permit) and SEPA 2022-29

Hearing Date: January 10, 2023

Applicant: RH2 Engineering, Inc.
C/O Alicia Pettibone
22722 29th Dr. SE, STE 210
Bothell, WA 98021

Owner: City of Pasco
C/O Maria Serra
525 N. 3rd Ave,
Pasco, WA 99301

Location: The property is located East of HWY 395, North of East Foster Wells Rd., and West of Blasdel Rd., This parcel currently has no address (Parcel #113-090-058).

Legal Description: LOTS 3 & 4 & N2SW4 4-9-30

VICINITY MAP:

SUBJECT PARCEL



- Property size:** The current property (parcel) size is approximately 164.68 acres in size.
- Property to be used:** Approximately 70 acres of the north half of the property, with additional expansion of the south half at a future date.
- Comp. Plan:** Agricultural
- Zoning:** Agricultural Production 20 (AP-20)
- Suggested Recommendation:** Positive recommendation **with six (6) suggested findings of fact and ten (10) suggested conditions of approval**
- Suggested Motion:** I move to forward CUP 2022-10 to the Board of County Commissioners with a positive recommendation based on the six (6) findings of fact and ten (10) suggested conditions of approval.

APPLICATION DESCRIPTION:

Application is to allow for the expansion of the City of Pasco's Process Water Reuse Facility (PWRF). Expansion consists of three (3) phases. This proposal is for phase 2 of the project, which is the provision of additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment.

The applicant provided a **site plan**, which shows the location of the following features:

- Location of six lagoon ponds in total, located to the north and south of existing PWRF facility.
- Power and water supply lines.
- Future process water pump station.
- 14 ft. wide access road.

PUBLIC NOTICE:

- The Planning Staff emailed technical review requests to Technical Agencies on **December 15, 2022**.
- The Planning staff mailed notices to Property Owners within **one (1) mile** on **December 15, 2022**.
- A Public Notice was published in the *Franklin County Graphic* on **December 15, 2022** and *La Voz* on **December 15, 2022**.
- A sign was posted on the property on **December 27, 2022**.

SEPA:

- A SEPA Checklist was included in the application. Planning Staff [Lead Agency Responsible Official] reviewed the checklist and issued an Optional Determination of Non-Significance (Optional DNS) notice on **December 15, 2022** under WAC 197-11-355.
- The Washington State Department of Ecology filed the notice under **SEPA #202206121** in the statewide SEPA register.
- SEPA comment period deadline was **December 29, 2022**. As of the date of this staff report, no SEPA specific comments or appeals have been received.

APPLICABLE STANDARDS/CODES:

1. County Zoning-- County Code:
 - a. Chapter 17.10 Agricultural Production 20 (AP-20) Zone
 - b. Chapter 17.82 Special Permits
 - c. Chapter 18.04 State Environmental Policy Act Guidelines (SEPA)
 - d. Title 14 Development Code Administration
2. Franklin County Comprehensive Plan

PUBLIC COMMENT:

No public comments have been received as of January 3, 2023.

STAFF ANALYSIS:

The proposal is phase two of the three-phase expansion of the City of Pasco's Process Water Reuse Facility (PWRF). Phase 3 of the project has already been approved through CUP 2022-08, which consists of the construction of the Pasco Resource Recovery Center (PRRC). This phase will provide additional winter storage to the PWRF, through proposed lagoons on Bureau of Reclamation land (Parcel #113-090-058) located to the north and south of the current PWRF facility. Approximately 70 out of the total 80 acres of the northern half of the property are to be used for the lagoons, with additional acreage on the south half to be used for lagoons at a future date.

Staff recommends approval of the proposal based upon review of utilities goals and policies contained within the Franklin County Comprehensive Plan, along with review of the Franklin County Code. Based upon information provided by the applicant, the project will be a net benefit due to the increased ability of the facility to meet various state environmental standards.

AGENCY COMMENTS/CRITERIA FOR FINDINGS OF FACT:

1. **Public Works Department:** Public Works has concluded that the proposed use will not have a significant impact on the County Road System. Public Works has the following comments:
 - An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
 - Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).
2. **Franklin PUD:** *No comments received.*
3. **Benton-Franklin Health District:** *No comments received.*
4. **Cascade Natural Gas:** *No comments received.*
5. **City of Pasco:** *No comments received.*
6. **Franklin County Assessor's Office:** *No comments received.*
7. **DAHP:** *No comments received.*

8. **Confederated Tribes of the Colville Reservation:** *No comments received.*
9. **Confederated Tribes of the Yakama Nation:** *No comments received.*
10. **Nez Pearce Tribe:** *No comments received.*
11. **Fire District #3:** *No comments received.*
12. **South Columbia Basin Irrigation District:** *No comments received.*
13. **US Bureau of Reclamation:** *No comments received.*
14. **Department of Ecology:** *Comments received on December 28, 2022. Please see agency comment section for more information.*
15. **Franklin County GIS/E-911 Addressing:** *No comments received.*
16. **Planning and Building Department:** The Planning Department has determined the following suggested findings and provided comments for this application:
 - The property is located in the Agricultural Production 20 (AP-20) zone. A conditional use permit is required for the facility.
 - Franklin County Building Permit shall be required for fencing and lagoons.
 - The Comprehensive Plan designation for the property is Agricultural.
 - Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with local air-quality requirements. Vegetative cover or a tackifier shall be provided as soon as practicable following clearing and grading. Dust control shall comply with applicable local standards.
 - Should archaeological materials (e.g., bones, shell, beads, ceramics, old bottles, hearths, etc.) or human remains be observed during project activities, all work in the immediate vicinity shall stop. The State Department of Archaeology and Historic Preservation (360-586-3065), the Franklin County Planning and Building Department, the affected Tribe(s) and the County Coroner (if applicable) shall be contacted immediately in order to assess the situation and determine how to preserve the resource(s). Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) is required.

RECOMMENDATION:

According to the Franklin County Code, Chapter 17.82 Special Permits, the Planning Commission shall:

1. Make and enter findings of fact from the record and conclusions thereof;
2. Shall render a recommendation to the Board of County Commissioners as to whether the proposal be denied, approved, or approved with modifications and/or conditions.

Findings of Fact Criteria by Planning Commission: The Planning Commission shall make and enter findings from the record and conclusions thereof as to whether or not:

1. The proposal is in accordance with the goals, policies, objectives, maps and/or narrative text of the comprehensive plan;

2. The proposal will adversely affect public infrastructure;
3. The proposal will be constructed, maintained and operated to be in harmony with the existing or intended character of the general vicinity;
4. The location and height of proposed structures and the site design will discourage the development of permitted uses on property in the general vicinity or impair the value thereof;
5. The operation in connection with the proposal will be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district;
6. The proposal will endanger the public health or safety if located and developed where proposed, or in any way will become a nuisance to uses permitted in the district.

Planning and Building Department Staff Assistance: Planning Staff will assist the Planning Commission with the determination of findings and conditions for CUP 2022-10.

Recommendation: The Franklin County Planning Department recommends that the Planning Commission forward a **POSITIVE** recommendation to the Franklin County Board of County Commissioners for application CUP 2022-10/SEPA 2022-29, with the following suggested findings of fact and suggested conditions of approval:

Suggested Findings of Fact:

1. The proposed use in the AP-20 Zoning District **IS** in accordance with goals and policies of the County Development Regulations (Zoning) and the applicable Comprehensive Plan.
 - a. The Franklin County Comprehensive Plan classifies the land as Agricultural.
 - b. The County Zoning map designates the land as Agricultural Production 20 (AP-20).
 - c. The applicant has applied for a Conditional Use Permit to allow the proposed use.
2. The proposal **WILL NOT** adversely affect public infrastructure.
 - a. Access to the parcel will be from East Foster Wells Road.
 - b. Public Works has determined that the proposed use would not have a significant impact on the County Road System.
3. The proposal **WILL BE** constructed, maintained, and operated to be in harmony with the existing or intended character of the general vicinity.
 - a. The existing character of the immediate area consists of farms, open space, existing sewer treatment plant and large-lot, residential homes.
 - b. The existing and intended character of the immediate area is Agricultural. The site is within the Agricultural area as designated by the Franklin County Comprehensive Plan.
 - c. The zoning of the site and most of the parcels near the site is either AP-20 or RR-5.
4. The location and height of the proposed structures and site design **WILL NOT** discourage the development of permitted uses on property in the general vicinity or impair the value thereof.

- a. The proposed facility is in conformance with, and integrated with, the existing PWWRF facility located nearby.
5. The operation in connection with the proposal **WILL NOT** be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district.
 - a. There are already existing lagoons located near the proposed expansion.
 - b. The proposed facility's operations will have limited, if any, negative impact to the County's transportation infrastructure.
6. The proposal **WILL NOT** endanger the public health, safety, or general welfare if located where proposed.
 - a. The project is subject to the County's Right to Farm ordinance.
 - b. The public was notified of this proposal in accordance with all guidelines and requirements, and the Planning Department received no written comments from the public.

Suggested Conditions of Approval:

1. The project shall comply with the requirements and recommendations of the **Franklin County Planning and Building Department**:
 - a. Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with local air-quality requirements. Vegetative cover or a tackifier shall be provided as soon as practicable following clearing and grading. Dust control shall comply with applicable local standards.
 - b. Should archaeological materials (e.g., bones, shell, beads, ceramics, old bottles, hearths, etc.) or human remains be observed during project activities, all work in the immediate vicinity shall stop. The State Department of Archaeology and Historic Preservation (360-586-3065), the Franklin County Planning and Building Department, the affected Tribe(s) and the County Coroner (if applicable) shall be contacted immediately in order to assess the situation and determine how to preserve the resource(s). Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) is required.
 - c. Application for Franklin County Building Permit shall be submitted for fencing and structures.
 - d. Applicant will need to comply with any other Local, State and Federal regulations pertaining to this development.
2. The project shall comply with the requirements and recommendations of the **Franklin County Public Works Department**:
 - a. An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
 - b. Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).

3. **RIGHT TO FARM:** Applicant shall be aware that this facility is located in an area where farming and farm operations exist. Further, to assist in preserving the right of farmers to operate utilizing accepted and appropriate practices, the County has adopted a Franklin County Right to Farm Ordinance, as amended. At no time shall a farm operation or accessory farm related enterprise, such as crop dusting operation or airstrip use, be deemed to be a public or private nuisance as it relates to the activities associated with this land use approval.
4. Shall comply with **fire code** requirements as stated in Franklin County Chapter 8.40.
5. The site shall be maintained at all times so as to not let the land become a fire hazard or accumulate with debris, weeds and/or garbage.
6. Future expansions and improvements at the site shall comply with the submitted and approved site plans (and any building plans submitted and approved). To allow future flexibility, changes to the plans which are determined to be minor or incidental may be done administratively by the Planning Department. Major changes, which do not meet the intent of, or seriously re-align, the approved plans, shall be reviewed by the Planning Commission through a new Conditional Use Permit process prior to that change occurring.
7. Nothing in this CUP approval shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances, or regulations applicable to this project.
8. In accordance with the County's Zoning Code, any special permit may be reviewed for potential termination and revocation by the Board of Commissioners if, after a public hearing, it is found that the conditions upon which the special permit was authorized have not been fulfilled or if the use authorized has changed in size, scope, nature or intensity so as to become a detriment to the surrounding area. The decision of the Board is final.
9. This permit applies to the described lands and shall run with the land. Any transferring of this permit to another party will require that notice be provided to the Franklin County Planning Department and Board of County Commissioners. It cannot be transferred to another site.
10. By accepting the issuance of this permit, the Permit Holder(s) agree(s) to accept full responsibility for any and all operations conducted or negligence occurring at this location and any incidents that occur on surrounding properties caused by operations or negligence at this location; Permit Holder(s) further agree(s) to indemnify and hold the County harmless and agree that the County is in no way negligent in relation to granting this permit, or operations or negligence that occur at this location or on surrounding properties caused by operations or negligence on this property; Permit Holder(s) further agree(s) to accept full responsibility for any future cleanup needed due to activities conducted that this location that impact the surrounding properties, and obtaining and retaining appropriate insurance coverage.

Agenda Item #1

PUBLIC NOTICE

AGENCY/PUBLIC COMMENT

CUP 2022-10

RH2 Engineering, Inc. – Process Water Reuse Facility



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Eastern Region Office

4601 North Monroe St., Spokane, WA 99205-1295 • 509-329-3400

December 28, 2022

Aaron Gunderson
Planner I
Franklin County Planning and Building Department
502 Boeing Street
Pasco, WA 99301

Re: City of Pasco Process Water Reuse Facility
File: CUP 2022-10, SEPA 2022-29

Dear Aaron Gunderson:

Thank you for the opportunity to comment on the Determination of Nonsignificance regarding the City of Pasco Process Water Reuse Facility project (Proponent: RH2 Engineering, Inc.). After reviewing the documents, the Department of Ecology (Ecology) submits the following comments:

Water Quality Program

Ecology commented on this project during a prior review period, and maintains that the Pasco PWRF Improvements Project appears to have multiple phases, yet the applicant did not provide the total soil disturbance. If the total acreage for soil disturbance for all phases (Common Plan of Development) exceeds 5-acres, Ecology will require a Construction Stormwater General Permit. If the total acreage disturbed during activities surrounding the project is less than 5-acres, the project may qualify for an Erosivity Waiver.

For more information, please contact Suman Paudel at (509) 601-2124 or via email at suman.paudel@ecy.wa.gov.

Water Resources Program

The water purveyor is responsible for ensuring that the proposed use(s) are within the limitations of its water rights. If the proposal's actions are different than the existing water right (source, purpose, the place of use, or period of use), then it is subject to approval from the Department of Ecology pursuant to Sections 90.03.380 RCW and 90.44.100 RCW.

For more information, please contact Herm Spangle at (509) 329-3488 or via email at herm.spangle@ecy.wa.gov.

State Environmental Policy Act (SEPA)

Ecology bases comments upon information submitted for review. As such, comments made do not constitute an exhaustive list of the various authorizations you may need to obtain, nor legal requirements you may need to fulfill in order to carry out the proposed action. Applicants should remain in touch with their Local Responsible Officials or Planners for additional guidance.

For information on the SEPA Process, please contact Cindy Anderson at (509) 655-1541 or via email at Cindy.Anderson@ecy.wa.gov.

To receive more guidance on or to respond to the comments made by Ecology, please contact the appropriate staff listed above at the phone number or email provided.

Department of Ecology
Eastern Regional Office
(Ecology File: 202206121)

E-cc: Alicia Pettibone, RH2 Engineering, Inc.

Memo



Public Works Department

To: Derrick Braaten, Planning & Building Director
From: John Christensen
cc: Craig Erdman, PE, Director / County Engineer
Date: December 16, 2022
Re: CUP 2022-10 City of Pasco PWRP

Derrick,

We have reviewed the application for a Conditional Use Permit along with SEPA 2022-29 to allow for the construction of the expansion for the City of Pasco Process Water Reuse Facility which is the provision of additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment. Property is located East of HWY 395, North of East Foster Wells Rd. and West of Blasdel Rd. (Parcel #113-090-085).

Public Works has concluded that the proposed use will not have a significant impact on the County Road System. Public Works has the following general comments:

1. An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
2. Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).

Please let me know if you have any questions.



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

September 19, 2022

Talmadge Oxford
Columbia-Cascades Area Manager
US Bureau of Reclamation

In future correspondence please refer to:
Project Tracking Code: 2022-05-03377
Property: PWRF Improvements
Re: NO Adverse Effect

Dear Talmadge Oxford:

Thank you for contacting the State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHP) regarding the above referenced proposal. This action has been reviewed on behalf of the SHPO under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. Our review is based upon documentation contained in your communication.

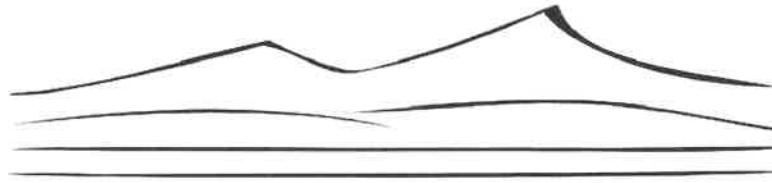
First, we agree with the Area of Potential Effect (APE) as mapped in the survey report. We also concur that the current project as proposed will have "NO ADVERSE EFFECT" on historic properties within the APE that are listed in, or determined eligible for listing in, the National Register of Historic Places. As a result of our concurrence, further contact with DAHP on this proposal is not necessary. However, if new information about affected resources becomes available and/or the project scope of work changes significantly, please resume consultation as our assessment may be revised. Also, if any archaeological resources are uncovered during construction, please halt work immediately in the area of discovery and contact the appropriate Native American Tribes and DAHP for further consultation.

Thank you for the opportunity to review and comment. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. If you have any questions, please feel free to contact me.

Sincerely,

Holly Borth
Preservation Design Reviewer
(360) 890-0174
Holly.Borth@dahp.wa.gov





Cultural Resource Consultants

TECHNICAL MEMO 2107Q-3

DATE: July 26, 2022

TO: Paul Cross
RH2 Engineering

FROM: Margaret Berger, Principal Investigator

RE: Cultural Resources Assessment for the PWRF Improvements Project, Pasco,
Franklin County, Washington

The attached report contains our cultural resources assessment for the above referenced project. Background research and field investigations conducted by Cultural Resource Consultants, LLC (CRC) identified two historic properties within the project, being the Bonneville Power Administration (BPA) Benton-Franklin (B-F) Nos. 1 and 2 Transmission Lines (DAHP Property # 727922 and 665551). The B-F No. 1 Transmission line (DAHP Property # 727922) was energized in 1941 and is recommended eligible for listing on the NRHP under Criterion A for its association with the construction of the BPA's *Master Grid*, 1938-1945, and its role in the regional development of commercial, industrial, and government programs. The B-F No. 2 Transmission line (DAHP Property # 665551) was energized in 1952 and is recommended eligible for listing on the NRHP under Criterion A for its association with the BPA *System Expansion Period*, 1946-1974, and its similar role in the regional development of commercial, industrial, and government programs. As currently proposed, the project will not physically impact the transmission lines. Further, the limited profile of the project is unlikely to have a substantial visual impact on the properties.

Investigations also identified one archaeological site, 45FR671, in the project location. Archaeological site 45FR671 refers to the residual early to mid-twentieth century dirt road in the northeast corner of the project. The site is of low integrity and is recommended not eligible for listing on the NRHP. A finding of "**no historic properties affected**" is recommended. No further cultural resource investigations are recommended at this time. Please contact our office if you have any questions about our findings and/or recommendations.

CULTURAL RESOURCES REPORT COVER SHEET

DAHP Project Number: 2022-05-03377

Author: Jessica Gardner and Jackey Anderson

Title of Report: Cultural Resources Assessment for the PWRF Improvements Project, Pasco, Franklin County, Washington

Date of Report: July 26, 2022

County(ies): Franklin Section: 4 & 34 Township: 9 & 10N Range: 30E

Quad: Glade, WA Acres: 320

PDF of report submitted (REQUIRED) ☒ Yes

Historic Property Inventory Forms to be Approved Online? ☒ Yes ☐ No

Archaeological Site(s)/Isolate(s) Found or Amended? ☒ Yes ☐ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:

45FR671

Submission of PDFs is required.

Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.

Please check that the PDF displays correctly when opened.

Cultural Resources Assessment for the PWRF Improvements Project, Pasco, Franklin County, Washington

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Executive Summary

This report contains the cultural resources assessment for the Process Water Reuse Facility (PWRF) Phase 2 Project, Pasco, Franklin County, Washington. On behalf of the City of Pasco, RH2 Engineering, Inc. requested that a cultural resources assessment be completed ahead of ground disturbing activities associated with winter water storage improvements and expansions at the PWRF. Background research and field investigations identified two historic properties within the project, being the Bonneville Power Administration Benton-Franklin (B-F) Nos. 1 and 2 Transmission Lines (DAHP Property # 727922 and 665551). The B-F No. 1 Transmission line (DAHP Property # 727922) was energized in 1941 and is recommended eligible for listing on the NRHP under Criterion A for its association with the construction of the BPA's *Master Grid*, 1938-1945 and its role in the regional development of commercial, industrial, and government programs. The B-F No. 2 Transmission line (DAHP Property # 665551) was energized in 1952 and is recommended eligible for listing on the NRHP under Criterion A for its association with the BPA *System Expansion Period*, 1946-1974 and its similar role in the regional development of commercial, industrial, and government programs. As currently proposed, the project will not physically impact the transmission lines. Further, the limited profile of the project is unlikely to have a substantial visual impact on the properties.

Investigations also identified one archaeological site, archaeological site 45FR671, in the project location. Archaeological site 45FR671 refers to an early to mid-twentieth century dirt road in the northeast corner of the project location. The site is of low integrity and is recommended not eligible for listing on the NRHP. A finding of “**no historic properties affected**” is recommended. No further cultural resource investigations are recommended at this time.

1.0 Administrative Data

1.1 Project Information

Report Title: Cultural Resources Assessment for the PWRF Improvements Project, Pasco, Franklin County, Washington

Author: Jessica Gardner and Jackey Anderson

Report Date: July 26, 2022

Location: The proposed project is located on lands adjacent north and south of 957 E Foster Wells Rd and southeast of the Feed Lot Rd and Edwards Rd intersection in Pasco, Franklin County, Washington.

Legal Description: The proposed project is located in the NW¼ and the N½SW¼ of Section 4 in Township 9 North, Range 30 East, and in the W½NW¼ of Section 34, Township 10 North, Range 30 East, Willamette Meridian (W. M.). The project is in Franklin County parcel numbers 113090085, 113090058, and 124710054.

USGS 7.5' Topographic Map: Glade, WA (Figure 1).

Total Area Involved: 320 acres

Regulatory Nexus: Section 106 of the National Historic Preservation Act (NHPA)



Figure 1. Portion of USGS *Glade, Washington* quadrangle, including portions of Section 34 of Township 10 North, Range 30 East, and Section 4 of Township 9 North, Range 30 East, W. M., annotated with the project locations in red (Google 2022).

1.2 Research Design

This assessment was developed as a component of preconstruction environmental review with the goal of preventing cultural resources from being disturbed during construction of the proposed project by identifying the potential for any as-yet unrecorded archaeological or historic sites within the project. CRC's work was intended, in part, to assist in addressing state regulations pertaining to the identification and protection of cultural resources (e.g., RCW 27.44, RCW 27.53, RCW 68.60). The Archaeological Sites and Resources Act (RCW 27.53) prohibits knowingly disturbing archaeological sites without a permit from the Washington State Department of Archaeology and Historic Preservation (DAHP), the Indian Graves and Records Act (RCW 27.44) prohibits knowingly disturbing Native American or historic graves, and the Abandoned and Historic Cemeteries and Historic Graves Act (RCW 68.60) calls for the protection and preservation of historic era cemeteries and graves.

The project will occur on US Bureau of Reclamation lands under permits held by the same, and as such is subject to Section 106 of the NHPA. Under Section 106, any agency issuing a federal permit or license, providing federal funds or otherwise providing assistance or approval, must

take into account the undertaking's potential effects to historic properties within a defined area of potential effects (APE) (36 CFR 800.16(l)(1)). This process involves identifying and inventorying historic properties within the APE and evaluating those properties to determine if they are eligible for listing on the National Register of Historic Places (NRHP). NRHP eligible historic properties include prehistoric or historic (typically older than 50 years) districts, sites, buildings, structures, and objects, which meet defined criteria and integrity standards. If NRHP eligible historic properties are identified within the APE then potential adverse effects to the historic properties must be assessed, and a resolution of adverse effects are recommended.

CRC's investigation consisted of: (1) review of project information and correspondence provided by the project proponent and (2) examination of local archival, environmental, and archaeological datasets. On August 19, 2021, CRC contacted cultural resources staff at the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the Confederated Tribes and Bands of the Yakama Nation (YN) on a technical staff to technical staff basis to inquire about project-related information or concerns associated with an early project design in Parcel 113090085 (Appendix A). Tribal correspondence was not intended to be or replace formal government-to-government consultation. On August 23, 2021, a representative from the YN responded that the project is in the traditional homeland of the Yakama, within Yakama ceded lands, has a high probability for encountering archaeological resources, and is in proximity to ancestral trails leading to Yakama villages, legendary/monumental sites, burials, and Traditional Cultural Properties (TCP). CRC renewed contact on January 24, 2022, to notify the CTUIR and YN of the expanded project location to include Parcel 113090058. CRC also notified the Colville Confederated Tribes (CCT) of the updated project location. Contact was renewed on March 11, 2022 when CRC notified the CCT, CTUIR, and YN of the expanded project location to include Parcel 124710054. At the completion of this report, no response had been received from the CCT or CTUIR. Any responses received subsequent to the submission of this report will be provided in an updated version. This assessment considered the results of previous cultural resources studies completed in the Pasco area, the magnitude and nature of the undertaking, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties at the project location, as well as other applicable laws, standards, and guidelines (per 36CFR800.4 (b)(1)) (DAHP 2021).

1.3 Project Description

The project proposes to expand the existing Process Water Reuse Facility (PWRF) through the construction of a pretreatment headworks, approximately 565 MG of winter storage lagoons, and related force mains, pump stations, and other infrastructure, with 13 to 15 acres set aside for proposed renewable gas. Planned construction is limited to Parcels 113090085 and 113090058 at this time. Proposed construction plans estimate approximately 1,897,00 cubic yards of ground disturbance caused by cut earthwork activities. Approximately 1,250,200 cubic yards of fill will be used to achieve the project design. Proposed lagoons will reach a minimum elevation of 509 to 528 ft above sea level. At this time, the project is considering grading Parcel 124710054 for use in land applying PWRF process water for growing crops. Parcels 113090058 and 124710054 are currently owned by the United States Bureau of Reclamation (USBR) and will be conveyed through quitclaim to the City of Pasco in association with this project.

For the purposes of this report, the area of interest for cultural resources (hereafter, “the project location”) is understood to be the area described above and depicted in Figures 1 (above) and Figure 2 and Attachment A. Parcels 113090085 and 113090058 will be referenced as the “main project location,” where referenced cumulatively. Parcel 124710054 will be referenced as “the northeast project location.” Parcel 113090058 is split by Parcel 113090085; the two pieces will be referred to as Parcel 113090058-N and -S.

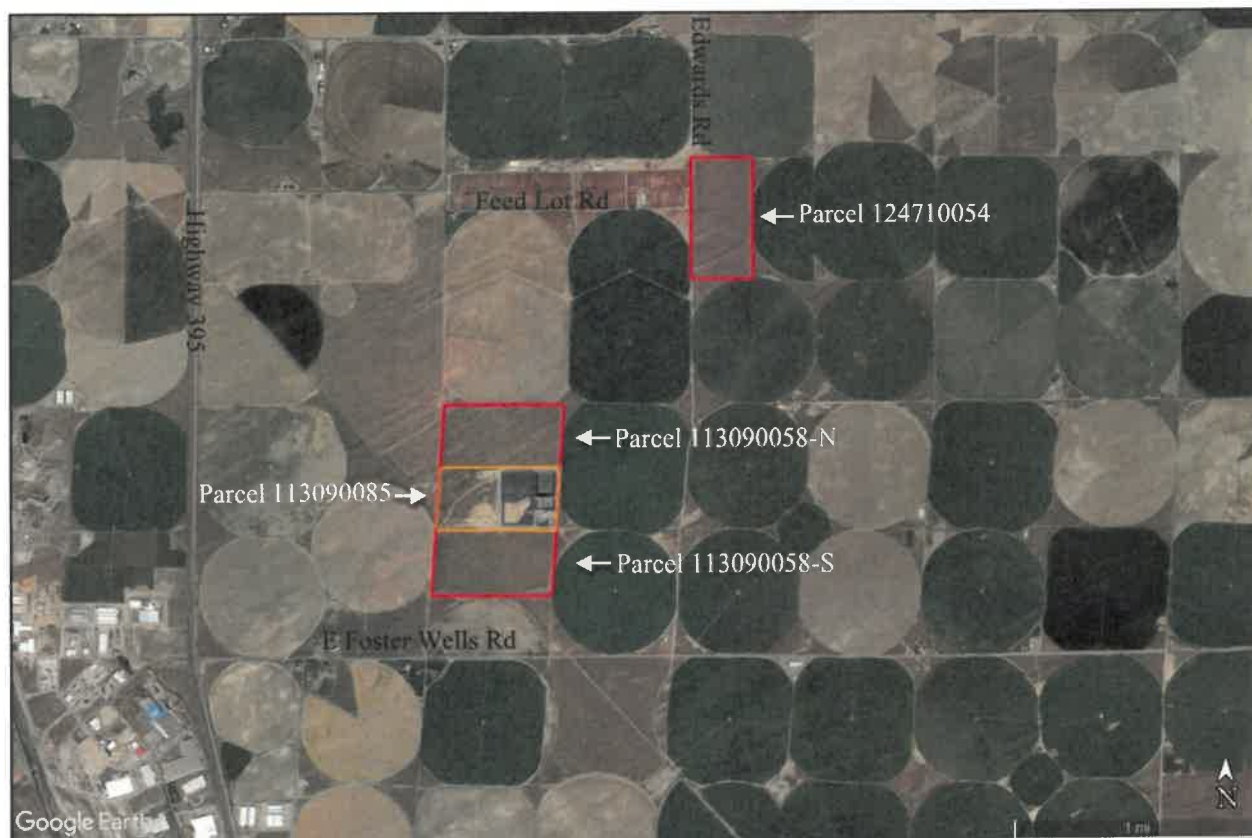


Figure 2. Satellite image of project location (red), including portions of Section 34 of Township 10 North, Range 30 East, and Section 4 of Township 9 North, Range 30 East, W. M., annotated with parcel designations and local road names. Parcel 113090085 is marked in orange to illustrate the interior parcel divisions.

2.0 Background Research

2.1 Overview

Background research was conducted in September 2021 and January and May 2022.

Recorded Cultural Resources Present: Yes [X] No []

The BPA B-F No 2 (DAHP Property # 665551) crosses through the southwest quarter of the main project location. It was inventoried in 2011 and recommended eligible for listing on the NRHP under Criterion A (Perrin 2011).

Context Overview: The following context overview summarizes environmental, historical, and archaeological information contained in local cultural resource reports; archaeological and historical data from DAHP and Washington Information System for Architectural and

Archaeological Records Data (WISAARD); ethnographic resources; geological and soils surveys; historical maps and documents from the Bureau of Land Management (BLM) United States Surveyor General Land Status & Cadastral Survey Records database; HistoryLink; Historic Map Works; HistoricAerials; University of Washington's Digital Collection; Washington State University's Early Washington Maps Collection; and CRC's library. This report's discussion of geology, archaeology, and history incorporates context information from CRC's previous work in Pasco (e.g., Clennon and Berger 2020; Clennon 2018; Gardner 2021; Schumacher 2009).

In this and subsequent sections, radiocarbon dates and age ranges based on those dates are presented in calibrated calendrical years ago (cal BP). This notation indicates that the radiocarbon date has been corrected using current methodologies. Other age estimates are given as years BP (before present).

2.2 Environmental Context

Overview: The project location is in northeast Pasco, Washington. Pasco, together with the cities of Kennewick and Richland, is known as part of the Tri-Cities. The Tri-Cities are located at the confluences of the Yakima, Columbia, and Snake Rivers, in the heart of the Columbia Basin. The Columbia Basin, also known as the Columbia Plateau, is an environmental and geographic region bounded by the Cascade Mountain Range to the west, the upper Columbia River to the north, and the Blue Mountains to the southeast (Franklin and Dyrness 1973; WA DNR 2021). Elevation in the Columbia Basin ranges from approximately 400 to 2,700 feet above sea level (ft asl) (Franklin and Dyrness 1973; Grolier and Bingham 1978).

Situated in the sand dunes of the Pasco Basin, the project lies approximately 5 miles north of the Columbia River. The surface elevation at the main project location is approximately 530 to 540 ft asl, sloping down to the southeast. The surface elevation at the northeast project location is approximately 542 to 560 ft asl. The surfaces of both project locations ripple north to south according to the longitudinal sand dunes, oriented northeast to southwest. The main project location is located along an unnamed gravel access road which stems from E Foster Wells Road, approximately 0.5 mile east of Capitol Avenue. The northeast project location is located to the southeast of the intersection of the farm-road Edwards Rd and the Feed Lot North Rd. The project locations are situated in an agricultural area, with adjacent fields used to grow vegetables, grain, and/or silage (WSDA 2022). At present, agricultural fields abut nearly every edge of the project locations. An undeveloped lot sits to the west of the west edge of Parcel 113090058 – N. Feed lots are located directly west of the northwest corner of the northeast project location.

Geomorphology: The topography and geology of the southeastern Washington region has been shaped by a unique series of geomorphological events that are reflected in the landscape of the project location. The Columbia Basin features vast basalt plateaus, which have been channeled by rivers, deformed by the Yakima Fold and Thrust Belts, and covered with windblown loess (Franklin and Dyrness 1973; WA DNR 2021). The basalt that underlies the region is the Columbia River Basalt Formation, comprised of continental flood basalt deposits originating from more than 350 lava flows between 16.7 and 5.5 million years ago (USGS 2014; WA DNR 2021). Thereafter, during the Plio-Pleistocene, windblown loess was deposited extensively, especially in the southeast near the Palouse Hills. Climatic and geologic forces during the

Pleistocene Epoch were responsible for much of the present topography of the region, from 2.5 million years ago to 12,000 years ago. Deformation during the Pleistocene resulted in ridges and hills on the otherwise flat landscape (Franklin and Dyrness 1973; Grolier and Bingham 1978). Repeated glaciation created meltwater and floods which carved gorges and deposited outwash materials. Glacial lobes dammed parts of the Columbia River, creating glacial lakes, which resulted in deposition of deltaic and lacustrine sediments in some parts of the Columbia Basin (Grolier and Bingham 1978).

The sub-basin containing the project is the Pasco Basin, located between the Saddle Mountains to the north and the Columbia River to the south. During the late Pleistocene, Lake Lewis formed from accumulated glacial floodwaters and covered the Pasco Basin at a depth of 1,150 feet. This lake left lacustrine silt deposits, known locally as the Touchet Beds of Flint (Grolier and Bingham 1978). Around 12,000 years ago, the Holocene began (Fecht et al. 1987). Characteristic changes which occurred in the Pasco Basin at this time included climate change, glacial recession, and the end of glaciofluvial discharge entering the basin (Grolier and Bingham 1978). Regionally, physical degradations of the landscape during the Holocene have been caused by talus slopes, landsides, and gully erosion. Aggradations have been caused by stream deposition, sand dune activity, and loess accumulation (Grolier and Bingham 1978). In addition, volcanic ash, originating from Mount Mazama (approximately 6,600 years ago) exists as a layer several inches thick in the upper part of Holocene loess in places across the Pasco Basin (Grolier and Bingham 1978). Since the late Holocene, wind-deposited sand and silt has been the primary geologic force shaping the active sand dunes at the project location (Grolier and Bingham 1978; Schumacher 2009).

Mapped Surface Geologic Units: The project is within the mapped surface unit of Holocene dune sand (Qd), consisting of Holocene well-sorted, fine to medium sand and silt in active and stabilized dunes (WA DNR 2022). Local variations may include volcanic ash.

Mapped Soil Units: The project is located within four mapped soil units (Table 1; USDA NCRS 2022). Sixty-eight percent of the project is in Quincy loamy fine sand (0 to 15 percent slopes), 24 percent is in Quincy loamy fine sand (0 to 10 percent slopes), 7 percent is in Royal fine sandy loam (0 to 2 percent slopes), and 1 percent is in Sagemoor very fine sandy loam (0 to 2 percent slopes). Mapped soils units within the project consist of aeolian, alluvial, and lacustrine sediments that have been deposited on terraces, reflecting the natural history of the project. The Quincy loamy fine sand soils are considered excessively drained, and the others are considered well drained.

Table 1. Mapped soil units with typical profile descriptions in centimeters (cm), in order of greatest percentage of project location.

Soil Name (Map unit symbol)	Landform	Parent Material	Horizon 1	Horizon 2	Horizon 3	Horizon 4
Quincy loamy fine sand, 0 to 15 % slopes (89)	Terraces	Mixed eolian sands	0-10 cm: Loamy fine sand	10-153 cm: Fine sand	-	-
Quincy loamy fine sand, 0 to 15 % slopes (92)	Terraces	Mixed eolian sands	0-8 cm: Loamy fine sand	8-132 cm: Loamy fine sand	132-153 cm: silt loam	-
Royal fine sandy loam, 0 to 2 % slopes (128)	Terraces	Sandy alluvium	0-13 cm: Fine sandy loam	13-38 cm: Fine sandy loam	38-153 cm: Stratified fine sand to very fine sandy loam	-
Sagemoor very fine sandy loam, 0 to 2 % slopes (144)	Terraces	Loess over layered lacustrine deposits	0-10 cm: very fine sandy loam	10-23 cm: silt loam	23-46 cm: silt loam	46-153 cm: silt loam

Climate: The project is located within the Columbia Basin physiographic province (Franklin and Dyrness 1973). The continental climate is characterized by arid, cold winters and hot summers (Ames 2004). While there are diverse micro-climates within the Columbia Basin at large, the project is located at a lower elevation, which tends to be the driest area of the province (Solimano et al. 2012).

Vegetation: The project lies within the shrub-steppe vegetation zone, predominantly of the *Artemisia tridentata*-*Agropyron* (big sagebrush/bluebunch wheatgrass) association (Daubenmire 1970; Dickson 1999). The *Artemisia tridentata*-*Agropyron* zone has edible roots and berries such as *Lewisia rediviva* (bitterroot), varieties of *Lomatium*, and *Amelanchier alnifolia* (serviceberry). In addition, *Typha latifolia* (cattail) and *Scirpus acutus* (tule) are traditional basketry materials found in this zone (Chatters 1998).

Fauna: The following description of significant fauna native to the Plateau is summarized from Chatters (1998). In the recent past, important mammals in the Columbia Basin region included elk (*Cervus canadensis*), deer (*Odocoileus*), bison (*Bison bison*), bighorn sheep (*Ovis canadensis*), pronghorn (*Antilocapra americana*), and rabbits (lagomorphs). The Columbia River was historically home to a large quantity of anadromous fish including the Chinook salmon (*Oncorhynchus tshawytscha*), Sockeye salmon (*O. nerka*), Coho salmon (*O. kisutch*), white sturgeon (*Acipenser transmontanus*), and Pacific lamprey (*Entosphenus transmontanus*). Three types of freshwater shellfish are native to the area: the western pearlshell (*Margaritifera falcata*) occupies swift, cold, gravel or sand-bottomed streams and lakes; the western ridged-mussel (*Gonidea angulate*) lives in warmer, slower sand and silt-bottomed water bodies; and, other mussel species (*Anodonta*) live in marshy still-watered bodies. Ground birds of the Columbia Basin include grouse and quail such as the sage grouse (*Centrocercus urophasianus*). Hundreds of other bird species winter or breed in the Columbia Basin including the mallard (*Anas platyrhynchos*) and Canadian goose (*Branta canadensis*).

2.3 Archaeological Context

Overview: Pasco is geographically located within the southern Columbia River Plateau cultural area, for which the current archaeological record goes back 13,500 calendar years (Ames 2004). Also, of importance to the recognition of the long-standing human inhabitation of the area is the Ancient One, or “Kennewick Man.” The human remains of the Ancient One were found directly across from Pasco, on the Kennewick side of the Columbia River. Aged approximately 9,200 years old, the individual represents the oldest nearly complete skeleton found in North America (Kershner 2008).

Near the project, archaeological surveys have primarily been completed in preparation for the construction of McNary Dam and subsequent flooding of the Lake Wallula/McNary Reservoir area. Therefore, much of the archaeological understanding of the area comes from riverine sites (Ames 2004). Many of these sites are encompassed in the Tri-Cities Archaeological District (TCAD). Solimano et al. (2012) notes the majority of sites in the TCAD are from the last 2,500 years, followed by few sites from the 2,500-5,000 years ago, and a small quantity of early Holocene sites. According to Solimano et al. (2012), the TCAD has been less studied than other nearby archaeological districts in the Plateau region.

Archaeological Chronologic Sequence: Archaeological investigations support human presence in northwestern North America dating to 14,000 years ago (Gilbert et. al 2008). The project location is in the Plateau cultural and environmental region, which has been culturally and economically significant for thousands of years (Chatters 1998). Human occupation of the Columbia Basin region has been archaeologically dated to approximately 12,000 years B.P. and is described by several phases of cultural development (e.g., Chatters 1986; Daugherty 1956; Galm et al. 1981; Greengo 1982, 1986; Lohse 1985, 2005; Mehringer and Foit 1990; Nelson 1969; Rice 1969; Schalk 1982). The general pattern of human adaptation in the region appears to exhibit a change through time from an upland hunting strategy to a semi-sedentary riverine-based subsistence organization. This change broadly occurs between an earlier tradition comprised of several phases (Clovis: ca. 11,500 to 11,000 B.P.; Windust: ca. 11,000 to 8,000 B.P.; Vantage/Cascade: ca. 8,000 to 4,500 B.P.) and a subsequent, two-phase tradition: Frenchman Springs (ca. 4,500 to 2,500 B.P.), and Cayuse (ca. 2,500 B.P. to 250 B.P.) (Ames et al. 1998; Swanson 1956).

The division between the two broad traditions is marked by the archaeological appearance of several apparent innovations. Pithouses are first recognized during this time; other artifacts appear, such as those suggestive of resource intensification (ground stone mortars, pestles, and net sinkers). Also apparent is increased variation in stone-working technology, decline in the predominance of basalt, and the appearance of small stemmed and larger notched projectile points. Archaeological evidence of a riverine-based residence pattern, supported by seasonal camps at upland locations, appears to correspond with the ethnographically observed Plateau pattern. The earliest manifestations of this residence pattern are present by about 4,500 years ago.

The Plateau winter village pattern, noted in ethnographic literature, appears to have been established by 2,500 B.P. The Plateau subsistence model indicates a pattern of riverine settlement, a reliance on riverine and root resources, the development of complex fishing

technologies, and the extension of trading patterns and extension of apparent political links (Greengo 1986; Nelson 1969; Swanson 1956). An increase in the frequency of net sinkers suggests a multifaceted economy emphasizing large-scale fishing, this possibly organized into inter-village groups. Points dated to the Cayuse period are generally smaller, with notching occasionally added to the chipped triangular form (Nelson 1969). Bow and arrow technology appears to be widespread by about 2,000 years B.P., based on the morphology of projectile points from this time period. Cultural traditions established by the onset of the Cayuse phase appear to persist with little variation until the contact era, about 200 years ago, when disruptions associated with the Euro-American presence in the region resulted in a transformation of traditional social patterns.

2.4 Native Peoples

Traditional Territory: Ethnographers documented the loosely connected tribes and bands in the area when they first arrived in the late nineteenth and early twentieth century. Located near the confluences of several major rivers, the project has been described as within the traditional territory of the *palúspam* (Palus), Yakama, and Walla Walla of the Sahaptin-speaking peoples, whose territory included the mouth of the Snake River, a common-use landscape to the Umatilla, Wanapum, Walla Walla, and Nez Perce (e.g., CCT 2022; Ray 1936; Ruby et al. 2010; Schuster 1998; Sprague 1998; Stern 1998). The project is within the land ceded under the Treaty with the Yakama of 1855, of which the *palúspam* (Palus) and Yakama were signatory participants. It is also near the boundary of land ceded under the Walla Walla Treaty of 1855, on the south shore of the Columbia River (Governor's Office of Indian Affairs 2021). Today, the Yakama are represented by the YN and the Walla Walla are represented by the CTUIR. The *palúspam* (Palus) live on several reservations in the region and are represented as one of the twelve bands of the Confederated Tribes of the Colville Reservation (CCT 2022; Ruby et al. 2010).

Ethnographic records and oral histories corroborate the archaeological record's evidence for seasonal rounds carried out by Plateau groups. During the winter, people resided in pithouse or mat longhouse villages near rivers, mainly surviving on stored food. Starting in the spring and throughout summer and fall, people traveled into the uplands for food and resource procurement. While regional variances in subsistence occurred, in general fish, berries, roots, and game were all significant food sources for Plateau groups (Boxberger and Rasmus 2004).

Certain rights were held as part of the Yakama Treaty of 1855, including the exclusive right to take fish from streams within the created reservations and a shared right to fish from "all usual and accustomed places," in common with citizens of the Territory of Washington (Governor's Office of Indian Affairs [GOIA] 2022a:Article 3). In addition, they maintained the "privilege" of hunting, gathering, and pasturage on "open and unclaimed lands" (GOIA2022a:Article 3). This right was present in several other treaties in the Pacific Northwest, including the Walla Walla Treaty of 1855 (Beckham 1998; GOIA 2022b). Various individual and governmental actions, from fence lines to restricted licensing, have been used to limit this right across the Pacific Northwest, resulting in several lawsuits wherein the courts have held that these rights were originally held and maintained by the tribe and shared in common with Territorial citizens through the treaty, thus providing for the common harvest of public landscapes and resources (Beckham 1998; Dougherty 2020). This was further established by the *United States vs State of Washington*, also known as the Boldt Decision, in 1974 which determined tribes maintained a

right to 50 percent of the fish taken from within their recognized fishing grounds. It also included a stipulation that tribes had similar rights to hatchery-fish as long as the tribe participated in the hatchery process, and made the related tribes co-managers in the state fisheries. This decision was limited to signatory tribes of treaties which had specified fishing rights.

Place Names: Late nineteenth and early twentieth century ethnographers worked with local informants to document the names and locations of villages, resource areas, bodies of water, and other cultural or geographic knowledge. Oral histories also are evidence of land use and traditions. These features contribute to the broader archaeological context of the project and the nature of deposits that may be encountered during this assessment. They also speak to the importance of places on this landscape to Native American peoples, historical and contemporary.

Large permanent villages were located in prominent locations, such as at the confluence of the Columbia River (*Neh'i-Wána*) and the Yakima River (*Koots A Min Ma*) (Ray 1939, 1942). Solimano et al. (2012) noted several others while researching the TCAD. *Tanáxalu*, meaning “throws rocks at fish, was the name given for a large village and fishing site on the east bank of the Columbia, opposite Richland and west of the project (Ray 1936:144). *Chamná*, spelled *čamná* in Sahaptin, was a settlement of the Champnapam people on the lower Yakima River Valley, near present day Richland and southwest of the project (Stern 1998). *NaXiyamláma* was a Wauyukuma village on the Lower Snake River, southeast of the project (Stern 1998).

2.5 Nineteenth and Twentieth Century History

This section is summarized from the Confluence Project (2019), Kershner (2008), Kubik (1944), and Oberst (1978). When the Lewis and Clark expedition camped in the Pasco area in October 1805, party member John Whitehouse reported seeing at least two hundred American Indians at the confluence of two rivers, where the present-day Sacajawea State Park is located in Pasco. The party additionally documented mat-lodges and an “incredible” [*sic*] amount of salmon (Kershner 2008). Several fur traders were the next known Europeans to come through the area. Alexander Ross, in 1811, noted salmon in the area weighing 15-40 pounds. David Thompson also passed through temporarily in 1811. George Simpson later came in 1825 but did not have interest in the area. Europeans settled into the area at a slower pace compared to other areas in Washington. It was not until the 1860s and 1870s when ranchers increasingly started making their way into the basin. The construction of the Northern Pacific Railway in 1879 brought an influx of workers to the area, who settled in the railroad town of Ainsworth, close to the Snake River. The first immigrants included many Irish and Chinese laborers. The settlement was a boomtown until the completion of a bridge across the Columbia in 1884 shifted transportation routes away from Ainsworth to the Northern Pacific Railroad’s newly platted site of Pasco. Pasco was supposedly named by a railway engineer after a Peruvian village, Cerro del Pasco. The town of Pasco was officially incorporated in 1891. Irrigation created a booming agriculture industry by 1910 and the population rose from 254 in 1900 to 2,083 in 1910. Asparagus, strawberries, peaches, apples, and cherries were popular crops. At this time, Pasco was still the most populous of the Tri-Cities, home to railroad, industry, and agricultural workers. Like many historic towns, the core was destroyed by fire in 1919 and had to be rebuilt.

Growth was modest during the Great Depression and there was expansion of livestock raising that included sheep and turkey. With increased irrigation from the 1943 Columbia Basin Project,

Pasco was cemented as an agricultural hub of Eastern Washington. Pasco was also hugely impacted when it was chosen as a new location for a Naval Air Station in 1942. Soon after, the nearby Hanford Engineering Works was chosen as the location for a plutonium production plant. This led to another influx to the Tri-Cities population. The demographics of Pasco continued to change as more African Americans moved into East Pasco in the post-war era. Then, in the 1970s the Hispanic population increased as migrant farmworkers sought work in the area. This trend continued into the 1990s and 2000s as Pasco remained an agricultural hub. As of 2006, Franklin County was the first majority Hispanic county in Washington.

2.6 Historical Records Search

Review of historical maps and aerial imagery provided an understanding of the historic and modern land use, and ownership of the project. The General Land Office (GLO) conducted early cadastral surveys to define or re-establish the boundaries and subdivisions of Federal Lands of the United States so that land patents could be issued transferring the title of the land from the Federal government to individuals. These maps and land serial patent records provide information on land ownership in the 1800s. The GLO produced a map of Township 9 North, Range 30 East, W. M, including the main project location, in 1866 (Figure 3; USSG 1866). Several trails are mapped throughout the survey leading to and from the Columbia and Snake Rivers, including a trail that leads southwest to the Columbia River and has a northeast termination approximately 0.75 mile southeast of the project. The rivers' confluence is roughly five miles south of the project. In associated field notes, surveyor Edwin Richardson described the landscape on the northern boundary between Sections 1 and 6 as, "Land rolling, sandy, sage prairie, with abundance of bunch grass, soil 3rd rate" (Richardson 1863:294). In closing remarks about the entirety of surveyed area, Richardson added, "This Township lies nearly in the forks of Columbia and Snake Rivers and has long been traversed by the main trail from and to the Gold mines and Frazer river" (Richardson 1863:296).

A cadastral survey of Township 10 North, Range 30 East, including the NE project location, was completed in 1881 (see Figure 3; USSG 181). The map depicts a non-descript landscape cut through the northwest third by the Northern Pacific Railroad, a regional road, and a telegraph line, passing over three miles northwest of the NE project location. Edwin Richardson was also the lead surveyor for this survey and described the NE project vicinity as a "rolling" landscape, with second rate soil covered in "good grass [and] small, light sage" (Richardson 1881:672).

Records on file at the BLM (2022) document several land patents awarded in the project. Ida Barnhart was awarded a miscellaneous volume patent for the SW $\frac{1}{4}$ of Section 4 in 1908 (MV-0721-257). Charley H. James was purchased the patent for the W $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 34 in 1907 (MV-0627-403). The Northern Pacific Railway Co was awarded a serial patent in 1913 for over 3,360 acres of land, including Lots 3 and 4 of Section 4 (WAORAA 017422/ 365561). The Glacier Park Co was awarded a serial patent in 1990, which included the S $\frac{1}{2}$ N $\frac{1}{2}$ of Section 4 (WAOR 039718FD). The S $\frac{1}{2}$ N $\frac{1}{2}$ of Section 4 may have originally been part of the Palouse Reclamation Project as established in 1913 (Schroeder and Landeau 2013). Lands within the Palouse Reclamation Project were partially to fully revoked in 1990.

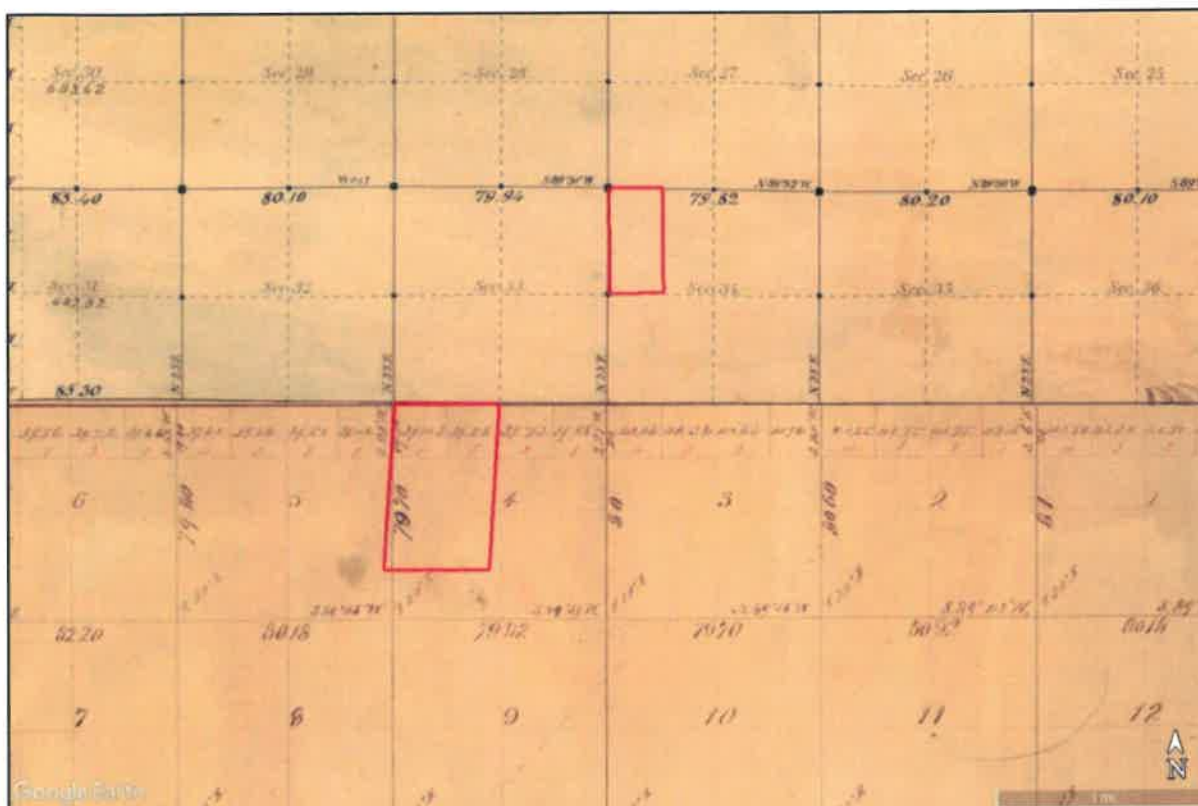


Figure 3. Portions of the Township 9 and 10 North, Range 30 East cadastral survey maps, annotated with the project locations in red (USSG 1866, 1881).

Historic topographic maps, county atlases, and aerial imagery provide information regarding project location land ownership and use during the 1900s and 2000s. Historic topographic maps of the project location are available beginning in 1917 (NGMDB 2022). Historic aerial imagery of the project location is available beginning in 1955 (NETR 2022). A search of Historic Map Works (2022) revealed one county atlas depicting the project location, produced in 1963. A comparison of topographic maps and historic aeriels produced between 1917 and 1965 showed moderate change, with the project location generally depicted within a vegetated dune landscape (Figure 4; USGS 1917, 1965; NETR 2022). In 1917, the Esquatzel Coulee was the closest mapped water source, with its southern termination mapped 2.7 miles west of the main project location. The region was traversed by the Northern Pacific Railroad over 1.8 miles west and northwest of the project locations. Two established roads passed within 0.4 miles east and west of the main project location with the eastern road passing through the NE project location. By 1955 the western road was no longer visible on aerial imagery, however the eastern road was still present and showed an intersection with a dirt road located centrally along the western boundary of the NE project location. Visible surface texture seen in 1955 aerial imagery suggested the sage prairie and bunch grass vegetation noted in 1863 was still dominant. By 1955, the BPA B-F Nos. 1 and 2, and the associated maintenance road, crossed the landscape, including the southwest corner of the main project location, set in a northwest to southeast alignment. The B-F No. 1 was energized in 1941 with the B-F No. 2 energized in 1952 (Matt Armstrong, personal communication, May 27, 2022).

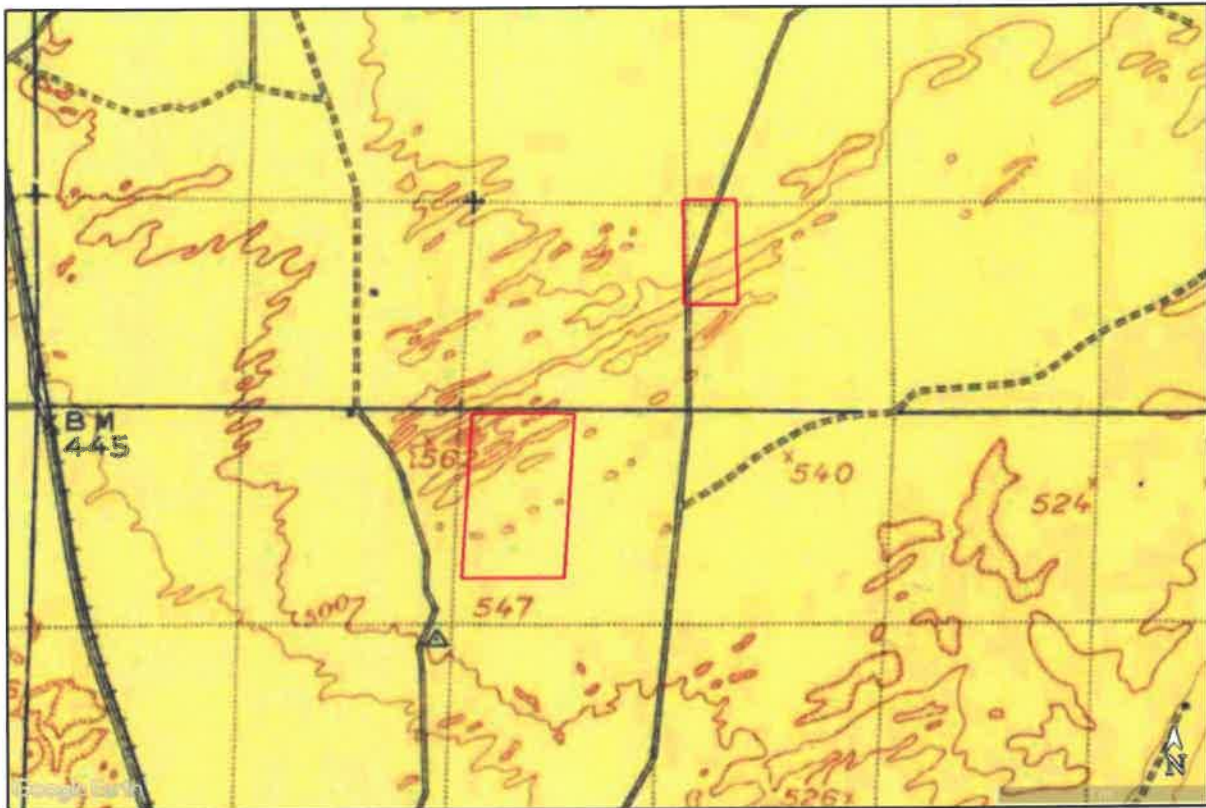


Figure 4. Portion of 1917 *Pasco quadrangle, WA*, annotated with the project location (red) and local transportation routes.

In 1963, ownership of the majority of Section 4 and portions of Section 34, including both project locations, was attributed to the U.S. government (Metsker 1963). It was near this time that the eastern road was demoted to an unimproved track which provided access to a short-lived landing strip located to the west of the NE project location (NETR 2022; USGS 1965). By 1965, irrigation lines were visible within 0.7 mile north of the NE project location, along the current Vineyard Rd alignment, and the area was traversed by US Route (US) 395, within 1 mile west of the main project location (Figure 5; USGS 1965). Feed lots were already under construction to the west of the NE project location, in the vicinity of the landing strip by 1964. They continued to expand through 1973 as the land to the north and south changed to large, circular crop fields. The eastern road appeared to shift to meet this new land usage, with the more northeasterly tracks abandoned or shifted to those aligned with the Section lines. The noted crossroad appeared to shift to a two-track with more localized usage.

Additional dirt-tracks were added to the main project vicinity by 1979, travelling southwest from the transmission lines segments within the project location, or travelling east from the transmission line along the southern section line of Section 4 (USGS 1979). By 1992, these later tracks had been removed and E Foster Wells Rd had been established, stretching east from US 395 along section lines, including the southern section line of Section 4 (USGS 1992). Water tanks, wells, and structures also began to dot the dune landscape, suggesting expanded settlement or land usage in the area.

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winter storage lagoon. Throughout the available aerial imagery, Parcel 113090058-N and -S and the northeast project location appeared to continue as a dune landscape covered in native vegetation.

2.7 Cultural Resources Database Review

A review of the WISAARD database identified cultural resource studies, precontact and postcontact archaeological sites, and historic properties in the vicinity of the project. This information provides details about the nature and likelihood of cultural resources at the project location (DAHP 2022a).

Cultural Resource Surveys: There have been five cultural resource surveys completed within a quarter mile of the main project location. A majority of these include overlapping portions of the main project location and thus roughly half of the main project location has been included in previous surveys. Of these, two surveys partially overlapped the main project location (Baker and Fagan 2007; Schroeder and Landreau 2013) and two surveys intersected the main project location (Crisson and Axton 2001; Landreau 2017). Survey methodologies included background research and a mix of field investigations via pedestrian survey and/or shovel test probes (STPs). Previously excavated STPs as a result of these surveys are depicted in Figure 6. No cultural resource surveys have been recorded within one-mile of the NE project location

Schroeder and Landreau (2013) completed a survey ahead of federal land transfer of two parcels: Parcel 124690059 immediately northwest of the project location and Parcel 113090058-N within the current project location. Field investigation consisted of pedestrian survey at 20-meter intervals. Archaeologists identified eight historic-era sites and isolates on the surface of Parcel 124690059 between one-quarter and one-half mile to the northwest of the project location, as described below. No cultural resources were documented in Parcel 113090058-N within the project location. The archaeologists concluded that as no precontact materials were observed on the surface, subsurface testing was not warranted, and no STPs were excavated in association with the survey. No further cultural resource investigations were recommended.

Baker and Fagan (2007) completed a survey of the western half of Parcel 113090085, ahead of the proposed usage as a disposal site for materials removed during construction of the Sacagawea Heritage Trail. Field investigations included pedestrian survey at 15-meter intervals and the excavation of five STPs, spread equally over the survey area (Figure 6). Surface visibility was approximately 50 to 60 percent, and the terrain was described as an open, gently rolling field with some grass and sagebrush. The road along the south of the survey area was gravel and there was a transmission line and a two-track dirt road through the southwest corner. STPs were excavated to a depth of 50 cm below surface (cmbs) and were consistent with mapped soils units. No cultural resources were documented.

Landreau (2017) completed a survey of a proposed lift station and 4-mile force main route, Alternative D, to bring “gray water” to the PWRF in 2017 ahead of potential facility expansions. The route passed through agricultural fields to the south before travelling along the access route and southern boundary of the current PWRF. The route was amended in 2018 to follow existing roads, including E Foster Wells Rd to the southwest, with subsequent testing of the new route (Landreau 2018). Pedestrian surveys of both routes were completed via four transects at 15-

meter spacing, covering the entire survey area. Thirty STPs were excavated within City right-of-way (ROW) in the initial survey, with nine more completed for the amended route. STPs were excavated to 100 cm below the surface, or to obstruction. Of these, six were excavated within the PWRF Improvements project location or the immediate vicinity (see Figure 6). Soils were consistent with the mapped soil units of the Quincy fine sandy loam series. All STPs were negative for cultural resources.

Crisson and Axton (2001) completed a survey ahead of transmission line repairs and conductor replacement along the BPA B-F transmission lines, which cross the SW¼ of Section 4 and Parcel 113090058-S of the project location at a southeasterly diagonal. Field investigation was conducted via pedestrian survey, with 20-meter transect spacing. No cultural resources were documented within a mile of the project during survey. Portions of the BPA B-F No 2 were resurveyed in 2021 in association with proposed fiber optic replacement work (Becker and Homan 2021). Investigations were inclusive of pedestrian survey and STPs at select locations, including the NE¼ of Section 5 within 0.25 mile of the project location. The survey considered the BPA B-F No 2 to be eligible for listing on the NRHP but did not provide additional documentation. No other cultural resources were identified along the BPA B-F No 2 Line, or within the project vicinity.



Figure 6. Satellite imagery annotated with current project location in red, areas of previous pedestrian survey (shaded area) and approximate locations of previous STPs within or adjacent the project.

Archaeological Sites: There are eight archaeological sites recorded within one mile of the project (Table 2). They are all historic-era sites and are located in a loose concentration, approximately 0.40 mile to the northwest of the main project location. These include five isolates (45FR612,

45FR613, 45FR614, 45FR615, and 45FR616) and three debris scatter sites (45FR617, 45FR618, and 45FR619) that were all recorded during a Section 106 survey, prior to selling federal land to a private owner (Schroeder and Landreau 2013). All artifacts were observed on the surface during pedestrian survey, and no subsurface testing was employed. The isolates and scatters mainly consisted of crimp-sealed cans, which were manufactured in the 1950s. One scatter in particular (45FR618) appeared to be correlated with the homestead of William Angus Chisolm, which existed at the survey location around 1910 (contemporaneous with the assemblage's manufacture dates). This scatter (45FR618) consisted of "hole-in-top cans of two types which were commercially available ca. 1910-20 among other, lead spot-sealed can types. One shard of patterned solarized vessel glass within this site also indicates that the site dates prior to 1920" (Schroeder and Landreau 2013:28). None of the sites or isolates were recommended as eligible for listing on historic registers.

The closest recorded precontact site is 45FR11, located roughly 5 miles to the south/southeast of the project. The site is recorded as a precontact shell midden, lithic, and camp site located on the north bank of the Columbia River, first documented in the 1940s as a village site (Dickson 1999). However, in addition to the McNary Dam inundating many sites along the Columbia River, a riprap levee was constructed at the site location, and it has not since been relocated.

Table 2. Recorded archaeological sites within one mile of the project.

Site Number	Site Type	Distance from Project (mile)	Historic Register Status	Potential Impacts
45FR614	Historic Isolate	0.27	No formal determination	None
45FR616	Historic Isolate	0.35	No formal determination	None
45FR613	Historic Isolate	0.38	No formal determination	None
45FR619	Historic Debris Scatter/Concentration	0.42	No formal determination	None
45FR618	Historic Debris Scatter/Concentration	0.44	No formal determination	None
45FR617	Historic Debris Scatter/Concentration	0.47	No formal determination	None
45FR615	Historic Isolate	0.52	No formal determination	None
45FR612	Historic Isolate	0.53	No formal determination	None

Inventoried Historic Properties: No inventoried historic properties are mapped within 0.25 mile of the project location (DAHP 2022a). However, a desktop survey of the BPA B-F No. 2 line was completed and submitted as Historic Property # 665551 in 2011 (Perrin 2011). The inventory was mapped as a single marker in Section 27 of Township 9 North, Range 30 East, but includes the full 21-mile line, including through the project location. The property was recommended eligible for listing on the NRHP under Criterion A, for its association with the

“themes of commerce, engineering, industry, military/defense, and government” and for its 1950 construction date within “the second period of significance for the BPA Transmission System, defined as System Expansion, 1946-1974 [Kramer 2010a:2]” (Perrin 2011). The inventory noted the line has been repaired or partially replaced, but that these modifications were done in-kind, and the line retains a high level of integrity.

Other Inventories: There are no cemeteries, historic register properties, or publicly documented TCPs within one mile of the project.

3.0 Archaeological Expectations

3.1 Archaeological Predictive Models

State Model: The DAHP statewide predictive model uses environmental data associated with documented archaeological sites to identify areas at which undocumented sites may be found (Kauhi and Markert 2009). Environmental categories included in the model are elevation, slope, aspect, distance to water, geology, soils, and landforms. The model contains five probability ranks: (1) low risk, (2) moderately low risk, (3) moderate risk, (4) high risk, and (5) very high risk. The model ranks the project location as predominantly high risk, with portions of the west half of Parcel 113090058-N ranked as very high risk.

3.2 Archaeological Expectations

This assessment combines the above cultural resources database review and predictive modeling results with information about local geomorphology, settlement patterns, and post-depositional processes to evaluate the possibility that archaeological deposits will be encountered at the project location. Late Pleistocene glacial events and subsequent flood episodes are responsible for much of the topography as viewed today, while aeolian processes have characterized deposition in the Holocene. Undisturbed aeolian deposits in the project location, if present, may contain buried archaeological material. Recorded disturbances in the project location include regional network of dirt tracks, including in the northeast project location, the construction of the BPA B-F Nos. 1 and 2 through Parcel 113090058-S in 1940 and 1950, the first stages construction of the PWFR in the east half of Parcel 113090085 by 1996, and the potential distribution of imported sediments and/or debris in the west half of Parcel 113090085 ca. 2007 (Baker and Fagan 2007; Perrin 2011; NETR 2022). The majority of these would have caused localized disturbances to surface materials with the exception of deeper excavation associated with lagoon construction and transmission pole installation. As such, the majority of subsurface deposits within the project location may be intact.

Background research identified eight historic-era archaeological sites within one-mile of the project location and one inventoried historic property within the project location. The closest documented archaeological sites are historic-era debris isolates and scatters, which are located roughly 0.4 mile away. The historic-era sites were dated to two time periods and considered to correlate with the initial 1910 homesteader, William Angus Chisolm, and subsequent 1950 land transfer to the U.S. Bureau of Reclamation. Patent records for the project location indicated that Parcel 113090058-S was acquired by Ida Barnhart in 1903 as part of a 160-acre lot. By the 1960s, Parcel 113090058-S had been transferred to the U.S. government. No other homesteads or individual claims were filed until the Glacial Park Co. gained Parcel 113090085 through

exchange in 1990. Similarly, historic aerials of the main project location did not depict any obvious scarring or alterations one might expect from settlement, agriculture, or animal husbandry, suggesting a limited usage of the project location. As noted above, the inventoried historic property known as BPA B-F No.2 (DAHP Property 665551) was built in 1950 and was the earliest visible construction on the main project location in historic records. Given this, historic-era archaeological materials, if present, would likely be on or near the ground surface and consist of historic debris related to the construction and upkeep of the BPA B-F lines. In addition, the current transmission lines are a continuation of the initial line completed in 1941 and 1952, though they have been updated and/or repaired, and may retain historic materials and/or context indicative of their historic value. While no historic properties or sites have been identified in the vicinity of the northeast project location, historic records indicated the area was traversed by a regional dirt road present on maps between 1917 and 1965 (NGMDB 2022). The road fell out of use shortly after. Elements of this road, or associated materials, may still be present within the northeast project location.

The project is on land ceded by members of the YN and is documented as in the traditional territory of several Plateau tribes. However, no ethnographic places or precontact archaeological sites have been recorded within one mile of the project. Recorded precontact archaeological sites in the region tend to be on or near the banks of the Columbia River. This contrasts with the DAHP's predictive model indicating a high to very high probability of unrecorded cultural resources to be present. Additionally, correspondence with YN cultural resource staff provided information that the project is in proximity to ancestral trails leading to Yakama villages, legendary/monumental sites, burials, and TCPs. While the project is distant from permanent water sources, and there is a lack of nearby recorded American Indian archaeological sites or named places, the fact that it is in close proximity to ancestral trails and modeled as high to very high risk, indicates that there is a higher probability of encountering precontact archaeology at the project. Precontact activities in the project location were likely more transient in nature and could have included overland travel, temporary camps, and/or resource gathering/hunting activities as well as possible ceremonial activities. Precontact materials that may be observed could include caches, lithic scatters, bone or stone tools or implements, faunal remains, and/or other materials that may represent temporary activities.

4.0 Field Investigations

Total Area Examined: The entire project (approximately 320 acres).

Date(s) of Survey: May 3rd to 6th, May 10th to 13th, and May 17th to 20th, 2022.

Weather and Surface Visibility: Weather was typically clear, sunny, and warm with temperatures in the mid-60s to low 70s °F, but included days with partly cloudy skies, scattered to heavy showers, and/ high winds. Mineral soil visibility was poor at 30 percent visibility due to existing vegetation and lichen. Mineral soil visibility was moderately improved in areas of animal burrows or cattle trails.

Field Methodology: Fieldwork consisted of pedestrian surface survey and excavation of shovel test probes. Surface survey was conducted with the goal of identifying any aboveground evidence of cultural resources. This was completed through surface observations conducted

between shovel probes set in linear transects and in wavy surface survey transects spaced 50 meters (m) apart and offset 25 m from the shovel probe transects. Probes were mapped on a GPS file in the office as part of the pre-field preparations and located in the field using a handheld GPS unit. Probes were spaced 50 m apart on a grid oriented to the cardinal directions. Probe locations were edited when moved. Probes measuring 40 centimeters (cm) in diameter were manually excavated with a shovel and 10-cm bucket auger to assess potential for subsurface archaeological sites within the project. Probes were excavated to a maximum depth of 150 cm below the surface, 20 cm into intact glacial materials, or to obstruction, whichever was shallower. Sediments were passed through ¼-inch hardware mesh to screen for artifacts.

Fieldwork Conducted By: Jessica Gardner, Alexis Crow, Christa Torres, and Francisco Torres. Notes are on file with CRC.

5.0 Results and Recommendations

5.1 Investigation Results

Archaeological Investigations: Surface survey of the project was conducted to observe the conditions within the project and to gauge the nature and likelihood for the project to contain as-yet unrecorded cultural deposits. For feasibility, the project was divided into four portions, being the North 80 acres (Parcel 113090058-N), the West 40 acres (Parcel 113090085), the South 80 acres (Parcel 113090058-S), and the NE 80 acres (Parcel 124710054) (Figure 7). In general, the project is formed of two rectangular lots occupied by longitudinal dunes oriented southwest to northeast (Figure 8). The North 80 acres and NE 80 acres appear to be the most intact, with evidence of disturbance noted in existing cattle trails and changes in vegetation. Several metal cans were observed in the west half of the North 80 acres, with locations which appeared to emanate from the northwest corner. The northwest corner is occupied by the remnants of a tall dune that is covered in shotgun shells and clay pigeon fragments. Given these items and the damaged condition of most of the cans, it is likely these were dispersed during recreational shooting activities. A relict roadbed was observed in the NE 80 acres, crossing in a northeast to southwest alignment in the vicinity of the dirt road observed in the 1954 historic aerials, and is recorded in Section 5.2 (Figure 9). A mechanical metal object, possibly being a side-mounted lawnmower bed, was noted buried in the roadbed, though this was in close proximity to the salt-block left for the cattle and may be related to later activities on the parcel (Figure 10). Near the southern termination of the road a raised oval rim of sand with a flat interior was observed (Figure 11). No materials were observed in association and a review of historic aerial imagery suggested this is the remaining feature of a dune which may have been partially dismantled sometime after 1973 (NETR 2022). An approximately 59 ft (18 m) by 91 ft (28 m) dispersed cluster of modern rubbish, including pop-tab beer cans, glass liquor bottles, and paint cans, was observed on the south edge of the NE 80 acres.

The West 40 acres has been altered through grading and import activities (Figure 12). The northeast corner has been built up into a steeply sided and flattened mound set north of a flat terrain that spreads to the southeast and southwest corners. A building is located at the southeast corner and is surrounded by compacted gravels. The northwest corner is dominated by dunes and appears to be intact. Similarly, the South 80 acres is occupied by dunes on the west half and moderately flat land on the east half (Figures 13 and 14). A pair of transmission lines, known as

the BPA B-F Nos. 1 and 2, and an associated two-track cross over the west half of the South 80 acres, and are documented in Section 5.2. A wire strand of hole-in-top cans with paired “church key” openings on one end and drilled holes on the other end of each can, was noted approximately 164 ft (50 m) southwest of the transmission lines and 140 ft (125 m) northwest of the nearest poles, being the BPA BF No. 2 16-6 “H” poles (Figure 15). No other items were noted in the vicinity and the significant distance suggests it was not associated with the construction or maintenance of the transmission lines.

Vegetation within the project location was dominated by cheatgrass, big sagebrush, and various wildflowers, including blue camas, fiddleneck, mustard, prickly phlox, and yarrow. It may be noted that mustard dominated areas of disturbance Heavy grazing has allowed for the invasive cheatgrass to generally dominate the vegetation present. Lands in the vicinity have been altered to large, rotating, single-crop agricultural fields which have impacted the adjacent portions of the project location. This is most evident in south and west portions of the South 80 acres; the south half of the South 80 acres is dominated by wind-blown cereal rye, while the western edge shows evidence of invasive weeds and wind-blown cereal rye that have been chemically burned off. Cereal rye grass was similarly noted in the southwest corner of the West 40 acres. The project location also hosts a range of burrowing animals including burrowing owls, coyotes, rodents, and beetles, as seen in their exposed burrows and mounds. The North 80 acres and NE 80 acres are used as rangeland for cattle herds and cattle were present during much of the survey of these areas. Taken together, the project locations show heavy disturbances to the native plant life with limited representation of the native vegetative zone noted in Section 2.2.

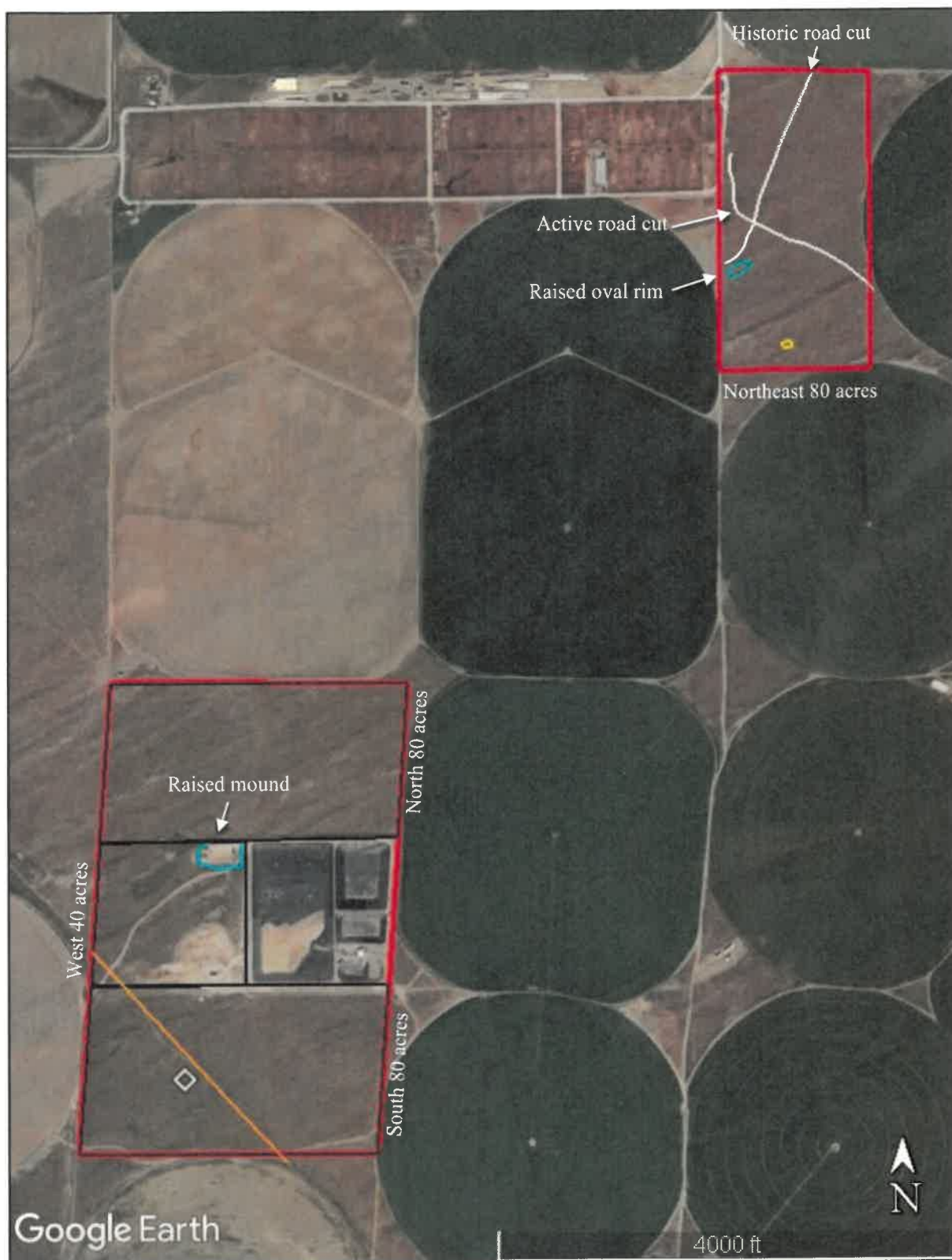


Figure 7. Satellite image of project location, annotated with project locations (red), parcel designations (black), the transmission line (orange), earthworks (light blue), a modern refuse scatter (yellow), hole-in-top cans (diamond), and road cuts (white).



Figure 8. Representative overview of typical field conditions. Image of dunes (foreground) within the North 80 acres with adjacent agricultural fields (background) as seen from Probe 84, view to the east.



Figure 9. Representative image of conditions of vacated roadcut (dashed white line) in the NE 80 acres. Image taken in vicinity of Probe 424, view to the northeast.



Figure 10. Image of mechanical metal object buried in the road cut, approximately 16 ft (5 m) north-northwest of Probe 394.



Figure 11. Overview image of raised oval in the Northeast 80 acres. Taken from the southwest end, view to the northeast.



Figure 12. Overview of conditions in the West 40 acres, showing a graded landscape (foreground), built mound (background, right), and dunes (background, left). Image taken from Probe 173, view to the northwest.



Figure 13. Representative image of dunes in the west half of the South 80 acres. Image taken between Probes 227 and 228 and includes flagged location of strand of cans, view to the north-northwest.



Figure 14. Overview of conditions in the east half of the South 80 acres, as seen from near the southeast corner of the parcel, view to the north. Foreground of the image shows the cereal rye dominant in this portion of the project.



Figure 15. Image of hole-in-top cans on a wire strand.

Subsurface investigations were completed through the excavation of 435 shovel probes (Figures 16 to 191; Appendix B). Probes typically extended between 100 and 150 cm below the surface with a typical profile representative of aeolian deposition and described as fine to medium grained sand which may become silty with depth (Figure 20). Variations included increased gravel content or the presence of compacted silts. Areas of disturbance included bioturbation and mechanical grading and were identified through surface conditions and/or the mottled and mixed nature of the sediments. All probes were negative for archaeological deposits. No intact historic or precontact archaeological materials or buried anthropogenic surfaces were identified during the course of this survey. Probes were backfilled following documentation.



Figure 16. Satellite image of the north 80 acres, annotated with project location (red), parcel boundary (black) and probe locations.



Figure 17. Satellite image of the west 40 acres, annotated with the project location (red), parcel boundary (black), and probe locations.



Figure 18. Satellite image of the south 80 acres, annotated with the project location (red), parcel boundary (black), and probe locations.

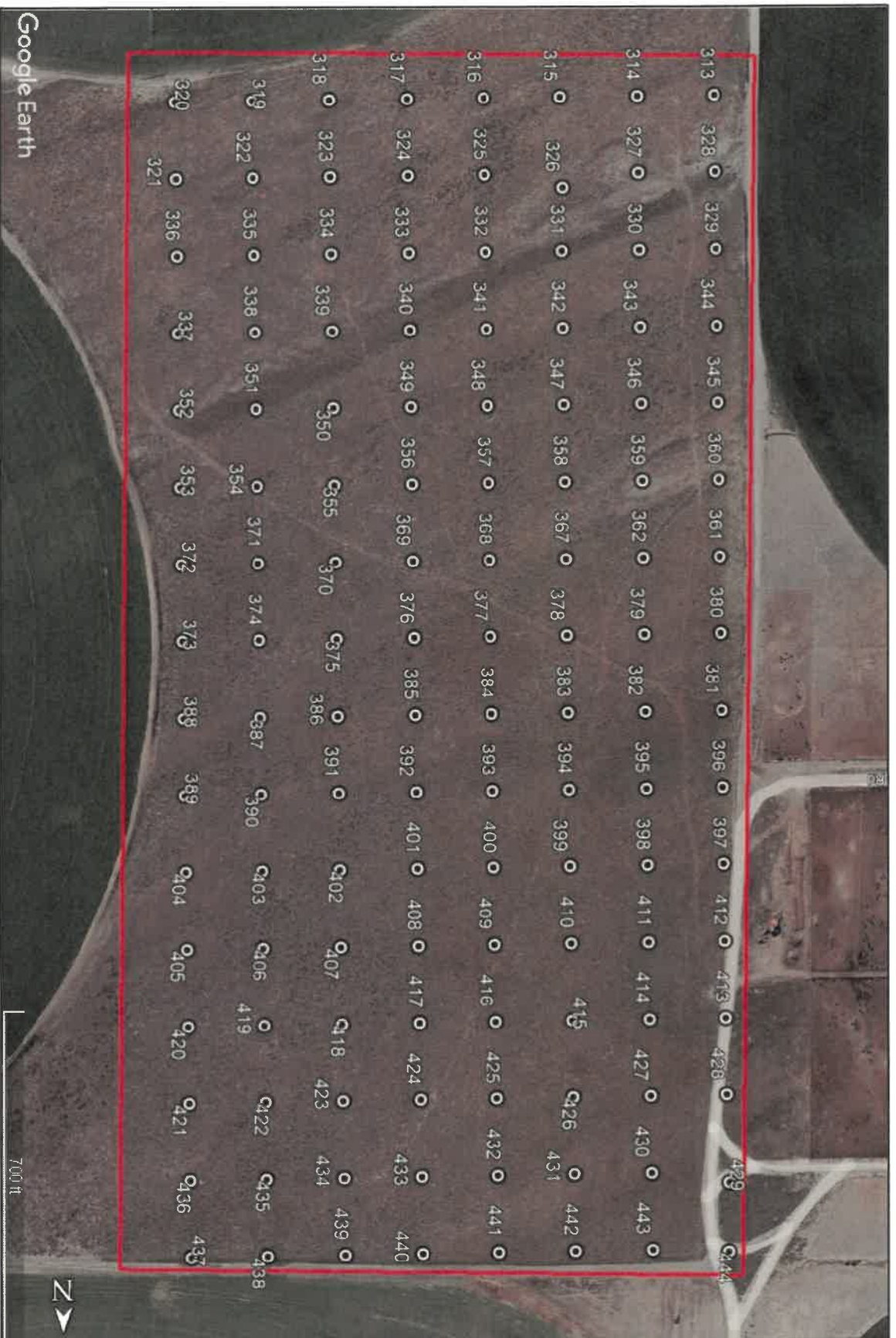


Figure 19. Satellite image of the northeast 80 acres, annotated with the project and parcel location (red) and probe locations.



Figure 20. Representative images of aeolian sands within the project location. Profile images of Probes 121 and 240.

5.2 Cultural Resources Identified

Three built environments were observed during the survey: an historic roadbed, recorded as archaeological site 45FR671 and BPA B-F Nos. 1 and 2 Transmission Lines, recorded as DAHP Property Nos. 727922 and 665551 and described below (Appendices C and D).

5.2.1 Physical Descriptions

Archaeological Site 45FR671: The site refers to the residual depression of an historic roadbed as observed in the NE 80 acres. The depression, measuring approximately 1,870 ft (421 m) long by 8 ft (2.5 m) wide and travels in a north-northeast to south-southwest alignment (Figure 21). It terminates at the north end near a modern, improved farm road travelling east to west and terminates at the south end on a partially active dune along an improved farm road set on a north to south alignment. It is bisected south of center by an unimproved two-track travelling in a northwest to southeast alignment. The depression is approximately 8-12 inches below the surrounding landscape and cuts across shallow dunes, allowing it to be visible in the field and in satellite imagery. The roadbed hosts a partially buried mechanical object and several sagebrush plants and other local vegetation suggesting it has not been in use for some time. Available historic maps and aerial imagery indicated a road was present along the alignment in the early and mid-twentieth century (NETR 2022; NGMDB 2022).

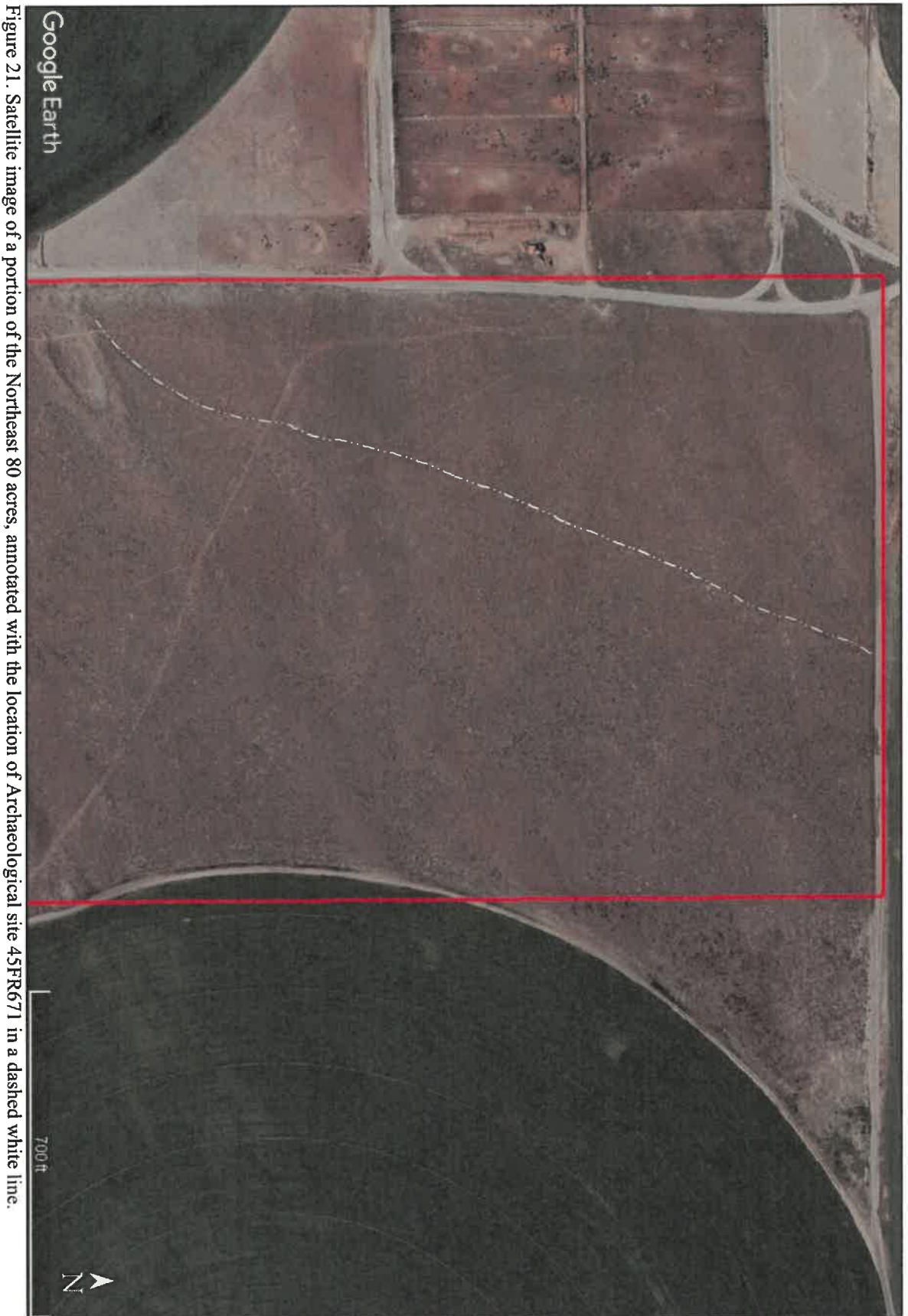


Figure 21. Satellite image of a portion of the Northeast 80 acres, annotated with the location of Archaeological site 45FR671 in a dashed white line.

Historic Property Inventories: Two historic built environments were observed within the project: the 1941 BPA B-F No. 1 Transmission Line (DAHP Properties # 727922) and the 1952 BPA B-F No. 2 Transmission Line (DAHP Property # 665551) (Figure 22; Attachment C).



Figure 22. Representative image of conditions along the B-F transmission line corridor, showing B-F No. 1 H-frame tower #16-6 (right) and B-F No. 2 H-frame tower #16-6 (left) divided by a tow-track.

DAHP Property # 727922: This recorded segment is limited to the three, two-pole H-frames and the associated elements and corridor located within the South 80 acres of project, in the vicinity of 957 E Foster Wells Rd, Pasco. Additional information concerning the overall line construction was obtained through correspondence with BPA historian, Matt Armstrong.

The B-F No 1 Transmission line is a 21.03-mile long 115kV single circuit line which runs from the BPA Benton Substation, ten miles north of Richland, to the Franklin Substation to the east of Pasco. The line was energized on June 1, 1941 as part of the Midway-Walla Walla line and renamed the Benton-Franklin No. 1 line on August 24, 1953 following construction of the adjacent B-F No. 2 transmission line (DAHP Property # 665551) by 1952. The alignment is comprised of 151 structures and associated components, further described as 4 lattice steel towers and 136 wooden, two-pole H-frame structures and 11 wooden, three-pole H-frame structures. Of these, 131 are suspension structures in which the conductor is strung in a nearly straight line, and 20 are dead-end structures in which the line is held under tension to allow for turns or other changes. In 2001, the BPA undertook repairs along the line, replacing a majority of the wooden poles and installing new aluminum and reinforced steel conductors to improve the line's thermal capacity (Crisson and Axton 2001).

The B-F No. 1 Transmission line runs on the north side of the power corridor it shares with B-F No. 2. The H-frame structures of each are set in adjacent pairs, approximate 36 ft (11 m) apart. The recorded segment of the line includes three wooden, two-pole, H-frame towers placed approximately 825 ft (251 m) apart and set in a northwest to southeast alignment. Three transmission lines are stretched between them, each hung from suspension insulators, likely of modern porcelain materials. Fragments of clear glass insulators were noted under the #16-5 H-frame tower, further suggesting the present insulators are replacements. The poles and metal crossbeams show comparable levels of weathering and rust. The wooden poles are driven directly into the earth but may have been augmented through imported materials or through pre-drilling of the locations as evident at structure #16-5 which appears to sit on a built mound which is covered in a moderately dense layer of rounded and machine-flaked medium-sized gravels.

DAHP Property # 665551: This recorded segment is limited to the three, two-pole H-frames and the associated elements and corridor located within the South 80 acres of the project, in the vicinity of 957 E Foster Wells Rd, Pasco. The BPA B-F No 2 Transmission Line was documented in 2011 (Perrin 2011); This report is specific to a segment of the overall inventoried transmission line and concurs with the earlier record. Additional information concerning the overall line construction was obtained through correspondence with BPA historian, Matt Armstrong.

The B-F No. 2 Transmission line is a 21.03-mile long 115 kV single circuit line which runs from the BPA Benton Substation, ten miles north of Richland, to the Franklin Substation to the east of Pasco. The line was energized on May 1, 1952 and retains the original operating title. The alignment is comprised of 150 structures and associated components, further described as 4 lattice steel towers and 140 wooden, two-pole H-frame structures and 6 wooden, three-pole H-frame structures. Of these, 140 are suspension structures in which the conductor is strung in a nearly straight line, and 10 are dead-end structures in which the line is held under tension to allow for turns or other changes. In 2001, the BPA undertook repairs along the line, replacing a majority of the wooden poles and installing new aluminum and reinforced steel conductors to improve the line's thermal capacity (Crisson and Axton 2001).

The B-F No. 2 Transmission line runs on the south side of the power corridor it shares with B-F No. 1. The H-frame structures of each are set in adjacent pairs, approximate 36 ft (11 m) apart. The recorded segment of the line includes three wooden, two-pole, H-frame towers placed approximately 825 ft (251 m) apart and set in a northwest to southeast alignment. Three transmission lines are stretched between them, each hung from suspension insulators (Perrin 2011), likely of modern porcelain materials. A fourth line is mounted to the side of southern poles in each pair. This is noted as a conductor line in Perrin (2011); however, personal communications with BPA suggests it may be a fiber optic line associated the Franklin-Munro Fiber System installed between the late 1980s to 2000s. The poles show various levels of weathering while the metal crossbeams are each rusted and weathered to a similar extent. The wooden poles are driven directly into the earth but may have been augmented through imported materials or through pre-drilling of the locations as evident at structure #16-5 which appears to sit on a built mound which is covered in a moderately dense layer of rounded and machine-flaked medium-sized gravels.

5.2.2 Evaluation of Significance

Eligibility Criteria: These structures were evaluated for their significance based on criteria for listing on the NRHP and the Washington Heritage Register (WHR). According to NRHP assessment criteria developed by the National Park Service (NPS), historical significance is conveyed by properties:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history [NPS 2002:2].

According to the NRHP guidelines, the “essential physical features” of a property must be intact for it to convey its significance, and the resource must retain its integrity, or “the ability of a property to convey its significance” (NPS 2002:44). The seven aspects of integrity are:

- Location (the place where the historic property was constructed or the place where the historic event occurred);
- Design (the combination of elements that create the form, plan, space, structure, and style of a property);
- Setting (the physical environment of a historic property);
- Materials (the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property);
- Workmanship (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory);
- Feeling (a property's expression of the aesthetic or historic sense of a particular period of time); and
- Association (the direct link between an important historic event or person and a historic property) [NPS 2002b:44].

Archaeological Site 45FR671: This site represents the remaining visible segment of a regional road included on maps from 1917 to 1958 (NGMDB 2022). Initially mapped as part of a network of roads connecting Pasco to Eltopia, the mapped road was diminished in the following years as regional highways and automobile routes improved. Historic aerial imagery produced in 1955 showed the alignment was still connected to several dirt roads set along section lines, likely representing farm roads (NETR 2022). The road fell out of use between 1964 and 1973.

Background research indicated the road was associated with early transportation in the region. However, little context remains to connect the road with this association. The road is recommended not eligible under Criterion A. No association with the life of a person of significance to history was identified and the road is recommended not eligible under Criterion B. The roadbed appears to be an unimproved dirt path cut through the dunes, as such, it does not represent a particular construction style and is recommended not eligible under Criterion C. No cultural remains of significance were identified in association with the roadbed. The roadbed is of low integrity and does not appear likely to yield as-of-yet unknown information important to history or prehistory. It is recommended not eligible under Criterion D.

The recorded segment of the roadbed is located within rangeland for a local stockyard with the adjacent historic alignment displaced or removed by agricultural fields. This has diminished the

integrity of association, design, feeling, setting, and workmanship. It likely maintains integrity of location and materials.

The site does not meet the necessary criteria or levels of integrity and is recommended not eligible for listing on the NRHP.

BPA NRHP general eligibility statement: The BPA is a non-profit federal power marketing administration established in 1937 to publicly market the power generated through hydroelectric projects in the Columbia River Basin (BPA.gov 2022; Kramer 2010). Today, the administration has expanded to handle power produced from hydroelectric dams and non-federally owned nuclear and other power plants and serves Idaho, Oregon, Washington, western Montana, and small portions of adjacent regions. A detailed history of the BPA has been covered elsewhere (e.g., Curran 1998; Kramer 2010, 2012).

In order to streamline management and historic evaluation of the BPA network and its elements, an updated context statement was published for the system in 2010 which argued for its evaluation as part of a multiple property submission for the NRHP (Kramer 2010). The context statement and subsequent 2012 NRHP nomination form determined a system by which BPA elements could be evaluated for their relationship and contribution to the overall system, and eligibility of listing on the NRHP. It was determined the system has an overall period of significance of 1938 to 1974, being the period of initial construction to the installation of the Dittmer Control Center and computerization of the system. Secondary periods of significance were suggested to better contextualize the value of particular elements within the network. These were the *Master Grid Development Period: 1938-1945* and the *System Expansion Period: 1946-1974* (Kramer 2010, 2012). The *Master Grid Development Period* relates to the initial construction and WWII expansions of the system which provided regional power and supplied the power and support necessary for wartime construction projects. The *System Expansion Period* includes post-WWII system elements which represent the growth of the BPA into a fully interconnected public-private utility, and the related technological improvements and regional expansions prior to the Dittmer Control Center. Appropriate elements are considered eligible under Criterion A for their contribution to the broad themes of Commerce, Industry, and Politics/Government. Select structures may be eligible under Criterion C for contributions to Agriculture or their representative or innovative architectural or engineering designs.

It was determined that in order for a named segment or individual transmission line to be eligible, it must, at minimum, meet all of the following standards. It must be (or have):

- Designed by or purchased at the direction of the Bonneville Power Administration,
- Owned and operated all or in part by the Bonneville Power Administration,
- Energization prior to 1975,
- Continued original function (i.e., related to the transmission of electricity). (Kramer 2012:45)

DAHP Property # 727922: The BPA B-F Transmission line No. 1 was energized on June 1, 1941 as part of the Midway-Walla Walla line and renamed the Benton-Franklin No. 1 line on August 24, 1953. In 2001, the conductor lines were replaced with aluminum and reinforced steel lines and several wood towers were replaced in-kind (Crisson and Axton 2001; Matt Armstrong, personal communication, May 27, 2022). A review of the line and adjacent ground surface

indicated the insulators have also been replaced and/or upgraded. However, as these changes are in-kind, or part of the continued functionality of the line, they do not substantially alter the integrity of the construction.

The line was constructed and energized by 1941 and has been continuously operated by the BPA since its constructions. Therefore, it is recommended eligible under Criterion A, under the *Master Grid Development* period of significance, for its contributions to the broad improvements to Commerce, Industry, and Politics/Government throughout the Northwest. Per Kramer (2012), a significant line of inquiry would be required to suggest the line is directly associated with a person of significance to the creation of the system; therefore, the line is recommended not eligible under Criterion B. The line is of basic construction and is not representative of a particular advancement in technology. It is recommended not eligible under Criterion C. The line is not associated with an archaeological site, nor is it likely to yield as-of-yet unknown information important to history or prehistory. It is recommended not eligible under Criterion D.

As noted above, the elements of the line have been replaced, generally in kind, as part of the continued functionality of the line. The line, therefore, generally maintains integrity of design, feeling, materials and workmanship. The line has been continually operated by the BPA and maintains integrity of association. The segment as documented has not been significantly moved and maintains its location and setting within a rural transmission corridor.

The BPA B-F Transmission Line No. 1 was constructed during the *Master Grid Development: 1938-1945* period of significance and is recommended eligible for listing on the NRHP under Criterion A, for its contributions to the broad improvements to Commerce, Industry, and Politics/Government throughout the Northwest.

DAHP Property # 66551: The BPA B-F No 2 Transmission Line was documented in 2011 and recommended eligible under Criterion A (Perrin 2011); This report is specific to a segment of the overall inventoried transmission line, concurs with the earlier record, and is completed here to address the current eligibility formatting guidelines.

The BPA B-F Transmission line No. 2 was energized on May 1, 1952. In 2001, the conductor lines were replaced with aluminum and reinforced steel lines and several poles were replaced in-kind (Crisson and Axton 2001; Matt Armstrong, personal communication, May 27, 2022). A review of the line and adjacent ground surface indicated the insulators have also been replaced and/or upgraded. However, as these changes are in-kind, or part of the continued functionality of the line, they do not substantially alter the integrity of the construction.

The line was constructed and energized by 1952 and has been continuously operated by the BPA since its constructions. Therefore, it is recommended eligible under Criterion A, under the *System Expansion* period of significance, for its contributions to the broad improvements to Commerce, Industry, and Politics/Government throughout the Northwest. Per Kramer 2012, a significant line of inquiry would be required to suggest the line is directly associated with a person of significance to the creation of the system and the line is recommended not eligible under Criterion B. The line is of basic construction and is not representative of a particular advancement in technology. It is recommended not eligible under Criterion C. The line is not

associated with an archaeological site, nor is it likely to yield as-of-yet unknown information important to history or prehistory. It is recommended not eligible under Criterion D.

As noted above, the elements of the line have been replaced, generally in kind, as part of the continued functionality of the line. The line, therefore, generally maintains integrity of design, feeling, materials and workmanship. The line has been continually operated by the BPA and maintains integrity of association. The segment as documented has not been significantly moved and maintains its location and setting within a rural transmission corridor.

The BPA B-F Transmission Line No. 2 was constructed during the *System Expansion: 1946-1974* period of significance and is recommended eligible for listing on the NRHP under Criterion A, for its contributions to the broad improvements to Commerce, Industry, and Politics/Government throughout the Northwest.

5.3 Conclusions and Recommendations

This assessment was conducted to determine potential effects of this project on cultural resources. Investigations inclusive of pedestrian survey and the excavation of 435 shovel probes identified one archaeological site, archaeological site 45FR671 in the project location. Archaeological site 45FR671 refers to an early to mid-twentieth century dirt road in the northeast corner of the project location. The site is of low integrity and is recommended not eligible for listing on the NRHP.

Additionally, two historic properties were identified in the southwest quarter of the project location, being the BPA B-F Nos. 1 and 2 Transmission Lines (DAHP Property # 727922 and 665551). The B-F No. 1 Transmission line (DAHP Property # 727922) was energized in 1941 and is recommended eligible for listing on the NRHP under Criterion A for its association with the construction of the BPA's *Master Grid*, 1938-1945 and its role in the regional development of commercial, industry, and government programs. The B-F No. 2 Transmission line (DAHP Property # 665551) was energized in 1952 and is recommended eligible for listing on the NRHP under Criterion A for its association with the BPA *System Expansion Period*, 1946-1974 and its similar role in the regional development of commercial, industry, and government programs. As currently proposed, the project will not physically impact the transmission lines. Further, the limited profile of the project is unlikely to have a substantial visual impact on the properties. A finding of "**no historic properties affected**" is recommended. No further cultural resource investigations are recommended at this time.

In the event that any ground-disturbing or other construction activities result in the unanticipated discovery of archaeological resources, work should be halted in the immediate area, and contact made with county officials, the technical staff at DAHP, and tribal representatives. A plan for unanticipated discoveries is included as Appendix E. Work should be stopped until further investigation and appropriate consultation have concluded. In the unlikely event of the inadvertent discovery of human remains, work should be immediately halted in the area, the discovery covered and secured against further disturbance, and contact effected with law enforcement personnel, consistent with the provisions set forth in RCW 27.44.055 and RCW 68.60.055.

6.0 Limitations of this Assessment

No cultural resources study can wholly eliminate uncertainty regarding the potential for prehistoric sites, historic properties or traditional cultural properties to be associated with a project. The information presented in this report is based on professional opinions derived from our analysis and interpretation of available documents, records, literature, and information identified in this report, and on our field investigation and observations as described herein. Conclusions and recommendations presented apply to project conditions existing at the time of our study and those reasonably foreseeable. The data, conclusions, and interpretations in this report should not be construed as a warranty of subsurface conditions described in this report. They cannot necessarily apply to site changes of which CRC is not aware and has not had the opportunity to evaluate.

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Figure 1. Project Area Parcels Map

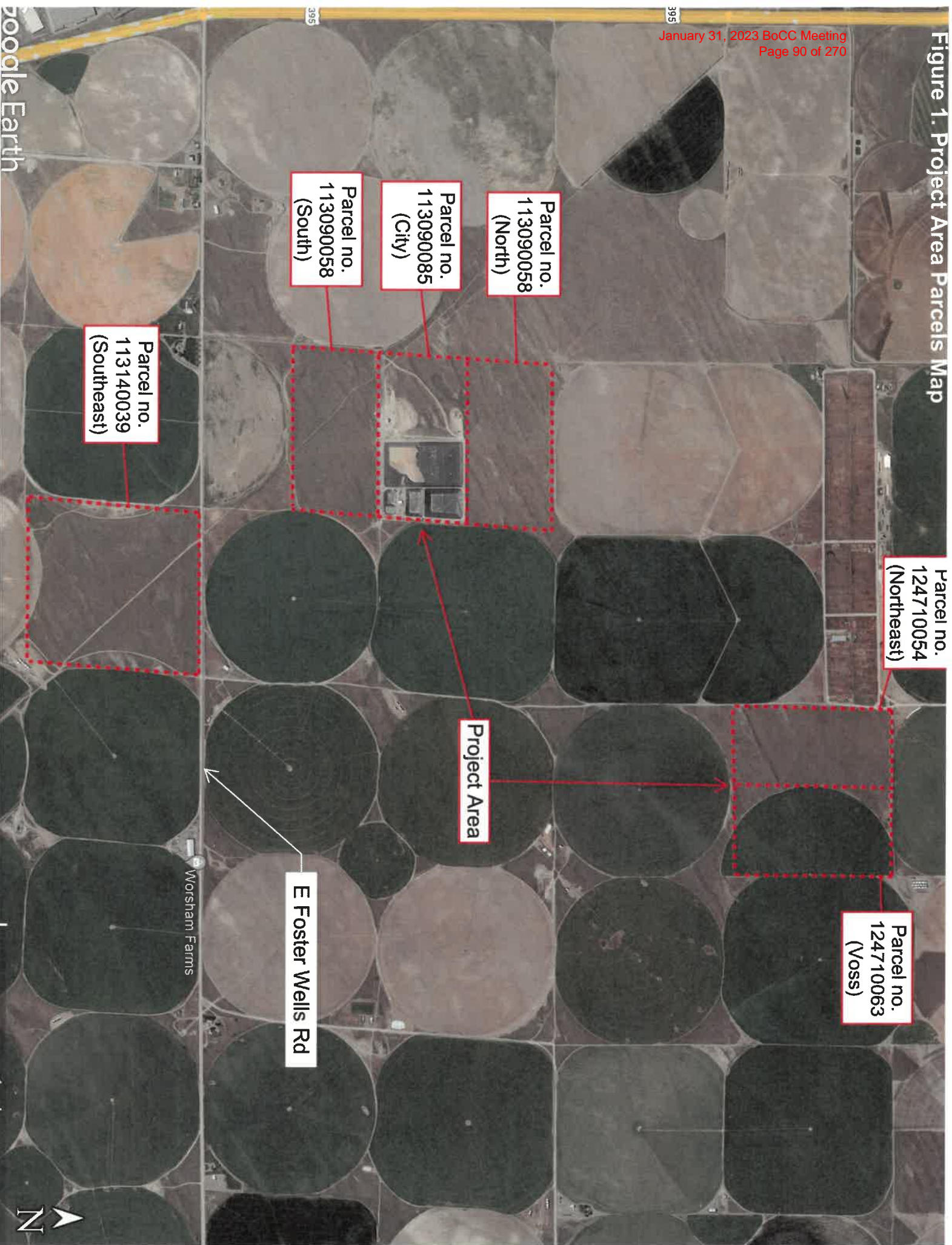
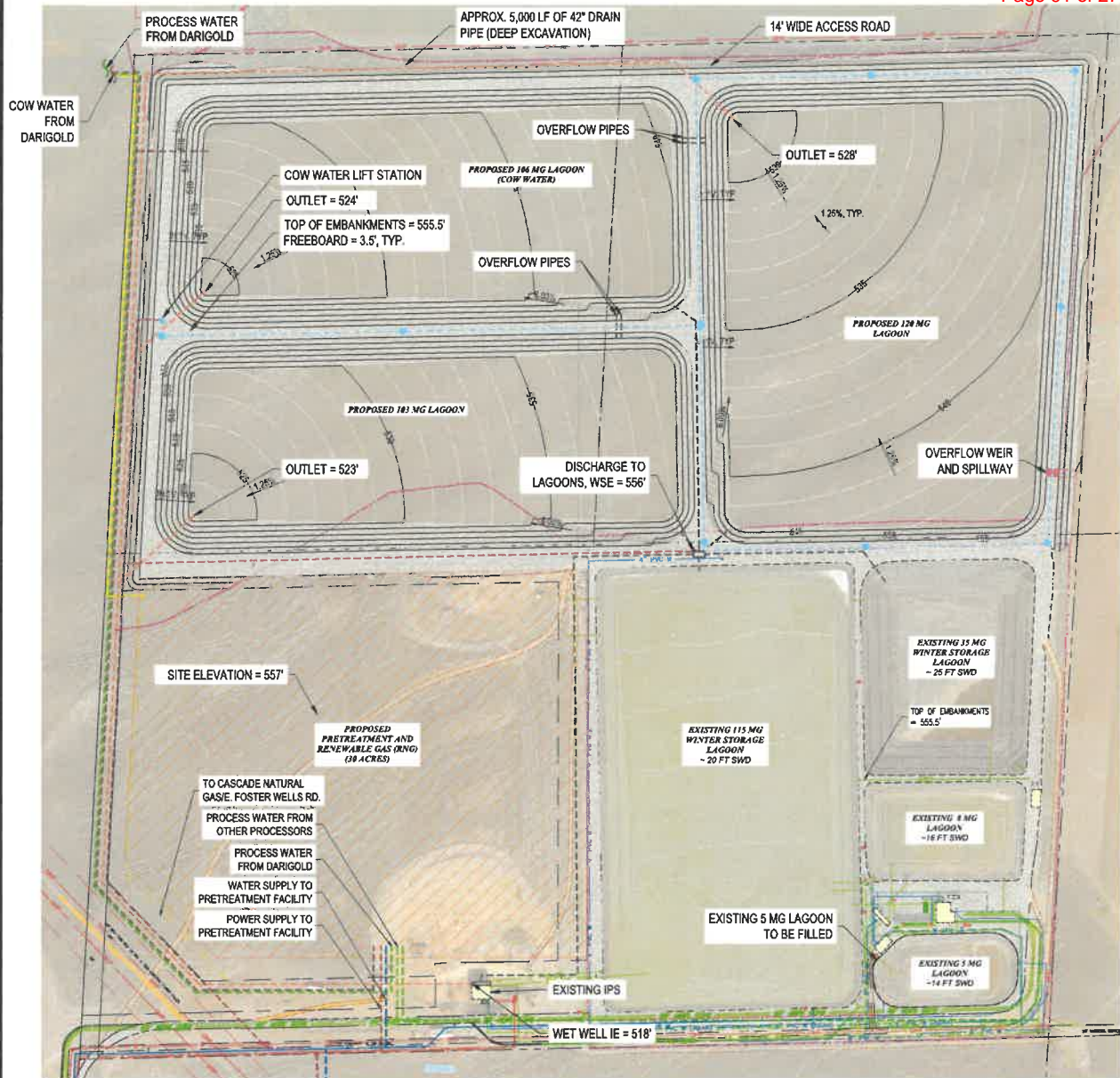


Figure 2. PWRF Improvements Conceptual Proposed Site Plan (Phases 2 and 3)



CONCEPTUAL SITE PLAN - PHASE 2

NTS

LAGOON STORAGE

Lagoon	Winter Storage (MG)
PROPOSED 106 MG LAGOON	106
PROPOSED 128 MG LAGOON	128
PROPOSED 181 MG LAGOON	181
Total	415

EARTHWORK

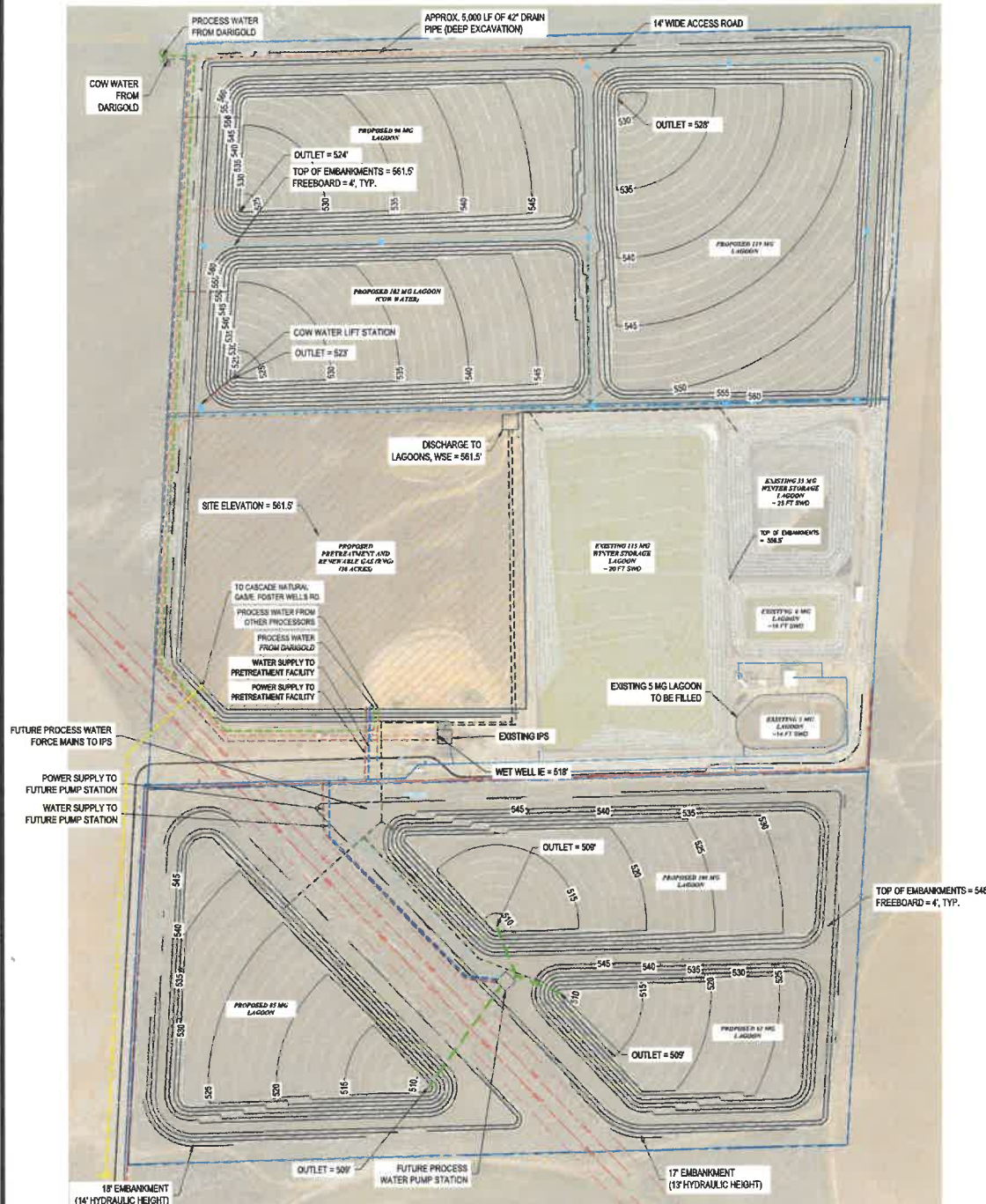
Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	1,430,100	637,900	792,200 CUT

LEGEND

---	PROCESS WASTEWATER
---	COW WATER FORCE MAIN
---	TREATED WASTEWATER (TO LAGOONS/IPS)
---	GRAVITY DRAINS (TO IPS)
---	TREATED WASTEWATER FORCE MAIN (FROM LAGOONS)
---	POWER LINE
---	NATURAL GAS LINE
---	WATER LINE

Figure 3. PWRF Improvements Conceptual Proposed Site Plan (Phases 2, 3 and Future Expansion)

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PROPOSED SITE PLAN

LAGOON STORAGE (PHASE 2)	
Lagoon	Winter Storage (MG)
PROPOSED 96 MG LAGOON	96
PROPOSED 102 MG LAGOON (COW WATER)	102
PROPOSED 119 MG LAGOON	119
Total	317

LAGOON STORAGE (FUTURE)	
Lagoon	Winter Storage (MG)
PROPOSED 85 MG LAGOON	85
PROPOSED 100 MG LAGOON	100
PROPOSED 83 MG LAGOON	83
Total	268

EARTHWORK (PHASE 2)			
Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	900,000	1,040,600	140,600 FILL

EARTHWORK (FUTURE)			
Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	997,400	209,600	787,800 CUT

LEGEND	
---	PROCESS WASTEWATER
---	COW WATER FORCE MAIN
---	TREATED WASTEWATER (TO LAGOONS/IPS)
---	GRAVITY DRAINS (TO IPS)
---	TREATED WASTEWATER FORCE MAIN (FROM LAGOONS)
---	POWER LINE
---	NATURAL GAS LINE
---	WATER LINE

TECHNICAL MEMORANDUM

Client:	City of Pasco		
Project:	Process Water Reuse Improvements		
Project File:	PSC 21-0236	Project Manager:	Kyle Smith, PE
Composed by:	Noah Bloxton		
Reviewed by:	Alicia Pettibone		
Subject:	PWRF Endangered Species Act Listed Species and Critical Habitats		
Date:	July 19, 2022		

This memorandum is intended for use by the US Bureau of Reclamation (USBR) to aid in initial Endangered Species Act (ESA) consultation with the US Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NOAA-Fisheries). Documentation of listed species presence and habitat is intended for the proposed Process Water Reuse Facility (PWRF) Improvements for the City of Pasco (City).

Project Overview

The City proposes expansion and improvements to its existing PWRF, which receives and treats wastewater from local food processors prior to land application of treated irrigation water to leasehold farmers in the immediate vicinity. During the winter months, irrigation is prohibited and the supply of process water at the PWRF exceeds the irrigation demand. Improvements are needed at the PWRF to meet operational, equipment, and hydraulic needs, and to add capacity for winter storage.

Expansion of the PWRF is planned to occur on parcel no. 113090085, which is the parcel on which the existing PWRF occurs; the western portion of this parcel will be the site of PWRF expansion. Additional PWRF expansion is planned on parcel no. 113090058, which is adjacent to the existing PWRF site on its north and south borders, and parcel no. 124710054 which is approximately 1 mile northeast. Parcel nos. 113090058 and 124710054 are currently owned by the USBR and acquisition by the City requires that USBR comply with the National Environmental Policy Act (NEPA), for which the ESA is a part. The attached **Project Area Map** shows the existing and proposed PWRF parcels.

Planned improvements at the PWRF include construction of treatment facilities (on parcel no. 113090085), excavation of winter storage basins (on parcel no. 113090058) and conversion of land to cropland for eventual land application of PWRF treated irrigation water (on parcel no. 124710054).

Biological Surveys

RH2 Engineering, Inc., (RH2) conducted biological surveys of the subject PWRF expansion parcels in May and June 2022. Full survey methodology and results are contained in the *Process Water Reuse Facility Improvements Biological Survey Report* (RH2, draft anticipated late July 2022). Surveys were targeted to assess the presence of and suitable habitat for state and federally-listed species and habitats, as well as the general biological conditions of the subject parcels. During these surveys, no ESA-listed species or suitable habitats were observed. State-listed shrub-steppe habitat and ground burrows providing habitat for State Candidate burrowing owl (*Athene cunicularia*) was observed, most notably on parcel no. 124710054.

ESA Listed Species and Habitats

Several species federally listed under the ESA occur within Franklin County (see attached **iPaC Report**); however, no critical habitat exists for any of the listed species within the PWRF Improvements project area. Furthermore, due to life history and habitat requirements, no suitable habitat is anticipated to be present within the project area for the species that are ESA-listed by either USFWS or NOAA-Fisheries. **Table 1** summaries listed species potentially present in the region surrounding the PWRF.

Table 1. Federally Listed Endangered and Threatened Species in Franklin County

Regulatory Jurisdiction	Federal Status	Common Name	Scientific Name	Designated Critical Habitat in Franklin County
USFWS	Endangered	Gray wolf*	<i>Canis lupus</i>	No
	Threatened	Bull trout*	<i>Salvelinus confluentus</i>	Yes, Columbia and Snake Rivers
	Threatened	Yellow-billed cuckoo*	<i>Coccyzus americanus</i>	No
	Threatened	White bluffs bladderpod*	<i>Physaria douglasii ssp. tuplashensis</i>	Yes, Columbia River shoreline near Hanford National Monument
NMFS	Threatened	Fall-run Chinook*	<i>Oncorhynchus tshawytscha</i>	Yes, Snake River ESU
	Endangered	Spring-run Chinook*	<i>O. tshawytscha</i>	Yes, Upper Columbia River ESU
	Endangered	Sockeye*	<i>O. nerka</i>	Yes, Snake River ESU
	Threatened	Steelhead*	<i>O. mykiss</i>	Yes, Upper Columbia River ESU
	Threatened	Steelhead*	<i>O. mykiss</i>	Yes, Middle Columbia River ESU
	Threatened	Steelhead*	<i>O. mykiss</i>	Yes, Snake River ESU
*Presence of suitable habitat for these species is not available in the project area. No effects are anticipated for these species, their foraging base, or their habitats.				

ESA listed species in the County with a summary and brief discussion of habitat suitability, as it pertains to the PWRF project site, are as follows.

Gray wolf, an endangered species under the ESA, occurs in Franklin County. Gray wolves are habitat generalists with a large historical range in North America. While gray wolves can live in a wide variety of environments, suitable habitat is generally considered to be forested terrains with sufficient ungulate prey populations and minimal human disturbance. The PWRF site is an arid desert with significant human development and agricultural activity in proximity. No suitable habitat for gray wolf is present in the PWRF project area and the project is anticipated to have no effect on this species.

Yellow-billed cuckoo, a threatened species under the ESA, occurs in Franklin County. Yellow-billed cuckoo require wooded habitat with dense cover in proximity to water. In the western United States, yellow-billed cuckoo tends to nest in willows (*Salix* spp.) in riparian corridors along streams and rivers and frequent nearby cottonwood (*Populus* spp.) stands for foraging. The PWRF site is an arid desert site comprised of shrub-steppe shrubs, grasses, and forbs; it is not in proximity to a natural waterbody. No suitable habitat for yellow-billed cuckoo exists in the project area; the project will have no effect on this species.

White bluffs bladderpod, a plant species which only occurs along the east side of the Columbia River near the Hanford National Monument, is ESA-listed as threatened. This species requires weathered alkaline paleosols and mixed soils overlying the Ringold Formation, which do not occur in the project area. The project will have no effect on this species.

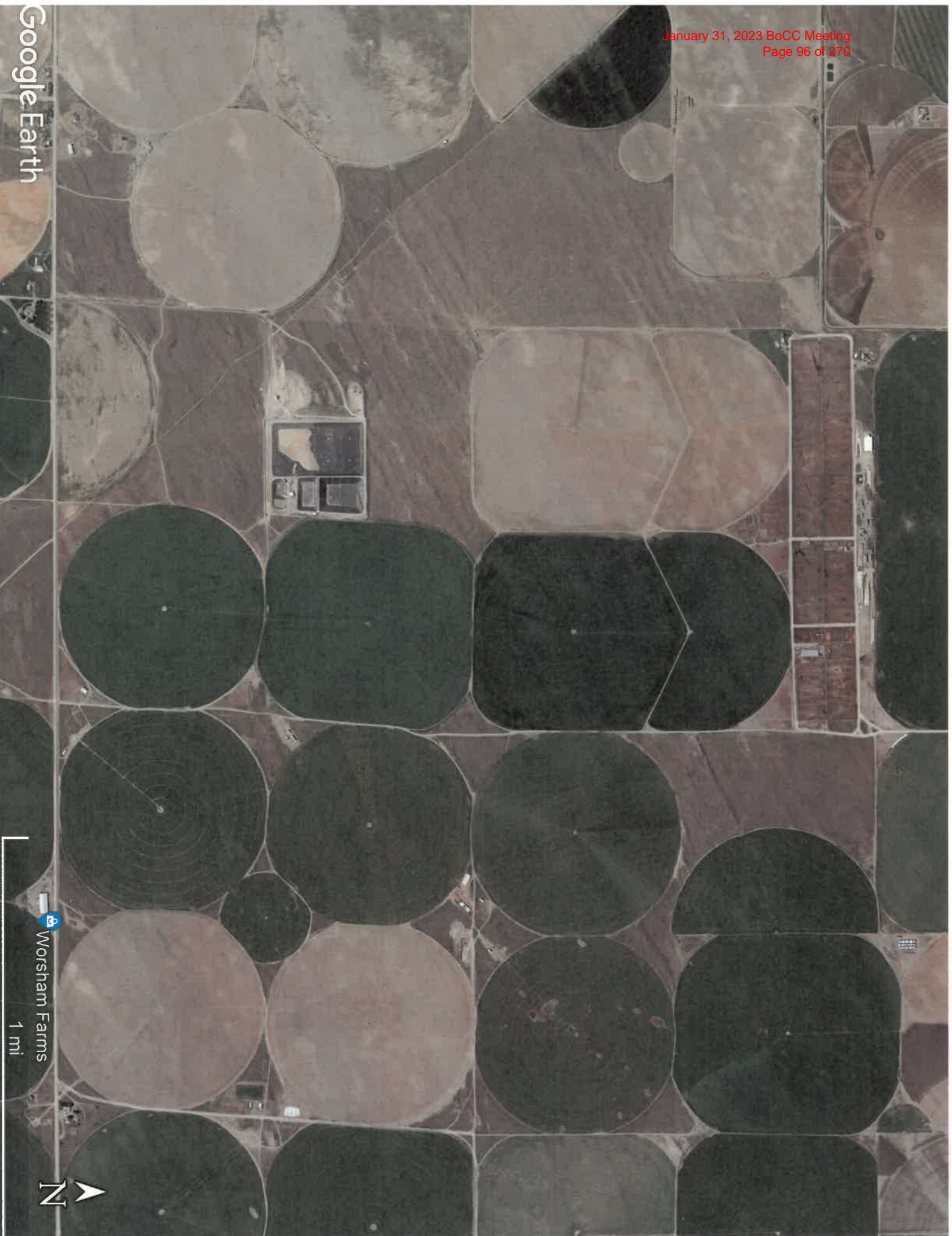
Other federally listed species include NOAA-Fisheries jurisdiction salmonids and bull trout, all of which occur in the Columbia or Snake Rivers, which are both approximately 5 miles from the project area. The proposed project will not have any adverse impacts on the Columbia River or Snake River; therefore, no effects are anticipated on listed fish species.

Effect Determinations

The PWRF Improvements project will have no effect on ESA-listed terrestrial or aquatic species or critical habitats under the jurisdiction of either USFWS or NOAA-Fisheries. No informal consultation is anticipated to be required. It is anticipated USBR may utilize this memorandum to initiate consultation with the Services; however, ultimate determination of ESA documentation needs and effects is the responsibility of USBR and the Services.

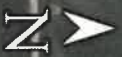
Attachments

1. Project Area Map
2. IPaC Report for PWRF, July 12, 2022



Worsham Farms

1 mi



IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Franklin County, Washington



Local office

Washington Fish And Wildlife Office

☎ (360) 753-9440

📠 (360) 753-9405

510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

Gray Wolf *Canis lupus*

Endangered

There is final critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/4488>

Birds

NAME

STATUS

Yellow-billed Cuckoo *Coccyzus americanus*

Threatened

There is final critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/3911>

Fishes

NAME

STATUS

Bull Trout *Salvelinus confluentus*

Threatened

There is final critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/8212>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Flowering Plants

NAME

STATUS

White Bluffs Bladderpod *Physaria douglasii* ssp.

Threatened

tuplashensis

Wherever found

There is final critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/5390>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Bull Trout <i>Salvelinus confluentus</i> https://ecos.fws.gov/ecp/species/8212#crithab	Final
White Bluffs Bladderpod <i>Physaria douglasii</i> ssp. <i>tuplashensis</i> https://ecos.fws.gov/ecp/species/5390#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional

information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Dec 1 to Aug 31

Black Tern *Chlidonias niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3093>

Breeds May 15 to Aug 20

Cassin's Finch *Carpodacus cassinii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9462>

Breeds May 15 to Jul 15

Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jun 1 to Aug 31

Evening Grosbeak *Coccothraustes vespertinus*

Breeds May 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Franklin's Gull *Leucophaeus pipixcan*

Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lesser Yellowlegs *Tringa flavipes*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Lewis's Woodpecker *Melanerpes lewis*

Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

Long-eared Owl *asio otus*

Breeds Mar 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3631>

Marbled Godwit *Limosa fedoa*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Olive-sided Flycatcher *Contopus cooperi*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

Rufous Hummingbird *elasphorus rufus*

Breeds Apr 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Sage Thrasher *Oreoscoptes montanus*

Breeds Apr 15 to Aug 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9433>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Cassin's Finch
BCC



Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)

Clark's Grebe
BCC



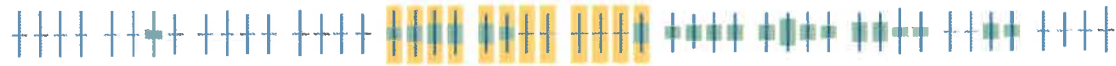
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)

Evening
Grosbeak
BCC



Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)

Franklin's Gull
BCC



Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)

Lesser
Yellowlegs

BCC

Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Lewis's
Woodpecker

BCC

Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Long-eared
Owl

BCC

Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
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range in the
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Alaska.)

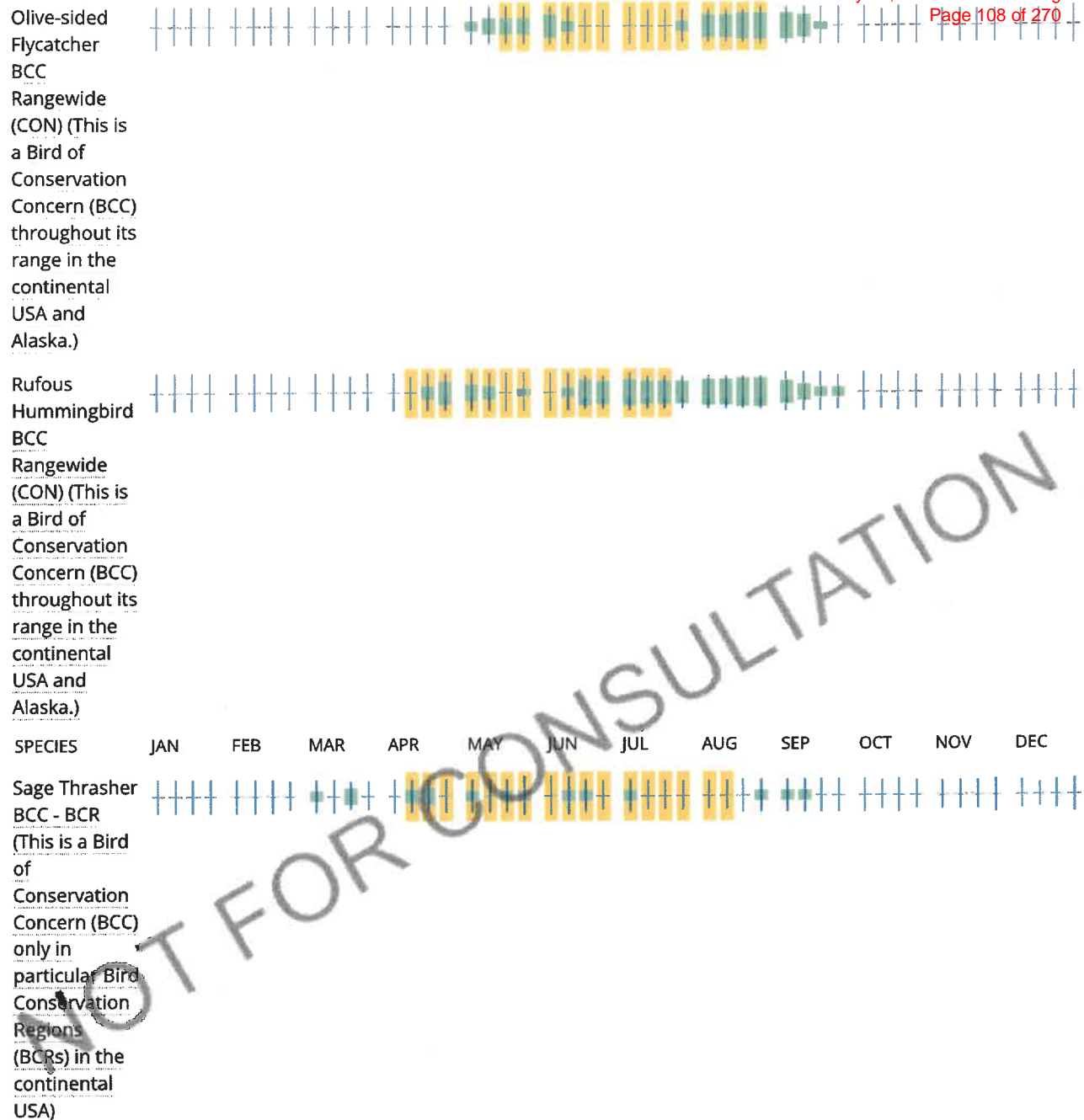


Marbled
Godwit

BCC

Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species

of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501

et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands

Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



PLANNING AND BUILDING DEPARTMENT

NOTICE OF OPEN RECORD PUBLIC HEARING/SEPA DETERMINATION (Optional DNS Process)

NOTICE IS HEREBY GIVEN that there has been proposed to the Franklin County Planning Commission an application by **RH2 Engineering, Inc.**, on behalf of **City of Pasco** 525 N. 3rd Ave., Pasco, WA 99301, is seeking approval of Conditional Use Permit (CUP), file # **CUP 2022-10**.

SEPA Comment Period Deadline: December 29, 2022

Proposal: Allow for the expansion of the City of Pasco's Process Water Reuse Facility (PWRF). Expansion consists of three (3) phases. This proposal is for phase 2 of the project, which is the provision of additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment.

Location:

PWRF phase 2 improvements are on Parcel #113-090-058. These properties are located: East of HWY 395, North of East Foster Wells Rd., and West of Blasdel Rd. This parcel currently has no address.

Determination of Completeness: The application has been declared complete for the purpose of processing.

Notification: This notice has been posted in the Franklin County Graphic, La Voz and the SEPA Register.

Public Meeting: A public meeting will be held to discuss the project, solicit input from interested citizens, and respond to project questions at the **Planning Commission Meeting**, scheduled for **6:30 PM, January 10, 2023**, in the Commissioner's Room at the Franklin County Courthouse at 1016 N. 4th Ave., Pasco, WA 99301.

Public Comment Period: SEPA comments must be submitted to the Franklin County Planning & Building Department by **4:30 PM** on **December 29, 2022**. Only comments received by the referenced date will be included in the SEPA record. Written project comments must be submitted by **12:00 PM** on **January 3, 2023** to be included in the Planning Commission Packet. If there are any questions on the proposal, contact the Franklin County Planning Department at 509-545-3521 or via email at planninginquiry@franklincounty.wa.gov.

Environmental Documents and/or Studies Applicable to this Application: Environmental Determination **No. SEPA 2022-29** has been assigned to this proposal. The SEPA comment period will end on **December 29, 2022**. It is probable that a Determination of Non-Significance or Mitigated Determination of Non-Significance will be issued for this proposal (WAC 197-11-355). This may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions. A copy of the subsequent threshold determination and any information concerning this action may be obtained by contacting the Franklin County Planning & Building Department.

Preliminary Determination of Regulations Used for Project Mitigation:

- The provisions contained in the Franklin County Code and the land use policies of the Franklin County Comprehensive Plan.
- Regulations of the Washington State Department of Fish and Wildlife, Washington State Department of Ecology, and Washington State Department of Natural Resources.
- Other required agency evaluations, approvals, permits, and mitigations as necessary.

Required Permits: Building permits will be required for any construction or placement of structures.

How to Watch/Participate Online: You can watch the proceeding on YouTube Live, by going to the Franklin County, WA agenda page at <https://www.franklincountywa.gov/AgendaCenter/Planning-Commission-2>. To participate online, more information will be posted to the agenda page, by the Friday proceeding the meeting.

Estimated Date of the Determination: DNS or MDNS will be issued following the close of the public hearing on the item on **January 10, 2023**.

To Receive Notification of the Environmental Determination: Contact the Franklin County Planning Department at the address or telephone number below.

Appeals: You may appeal the subsequent threshold determination by submitting an appeal to the address below within 10 days of issuance. The appeal must be in written form, contain a concise statement of the matter being appealed and the basic rationale for the appeal. All comments or appeals are to be directed to the Franklin County Planning & Building Department, 502 W. Boeing St., Pasco, WA 99301. More information on the appeal process is contained in Franklin County Code (FCC) 18.04.280.

Prepared December 15, 2022 by: Aaron Gunderson, Planner I, 502 W. Boeing St., Pasco, WA 99301 (509) 545-3521



PLANNING AND BUILDING DEPARTMENT

AVISO DE AUDIENCIA PÚBLICA/DETERMINACIÓN DE 'SEPA' (Proceso Opcional de DNS)

POR LA PRESENTE SE DA AVISO que se ha propuesto una solicitud por parte de **RH2 Engineering, Inc.**, a la Comisión de Planificación del Condado de Franklin en nombre de la **Ciudad de Pasco** 525 N. 3rd Ave., Pasco, WA 99301, que busca la aprobación del Permiso de Uso Condicional (CUP, por sus siglas en inglés), archivo # **CUP 2022-10**.

Plazo para recibir comentarios pertinentes a SEPA: 29 de diciembre de 2022

Propuesta: Permitir la expansión de la Instalación de Reutilización de Agua de Proceso (PWRP, por sus siglas en inglés) de la Ciudad de Pasco. La expansión consiste de tres (3) fases. Esta propuesta es para la fase 2 del proyecto, la cual es la provisión de almacenamiento de invierno adicional a través de lagunas propuestas en parcelas de propiedad de la Ciudad y en parcelas de propiedad de Recuperación, y establece un sitio de construcción para el pretratamiento futuro.

Ubicación:

Los mejoramientos de la fase 2 de PWRP aparecen en la Parcela Nº 113-090-058. Estas propiedades están ubicadas: al este de la carretera HWY 395, al norte de calle East Foster Wells Rd. y al oeste de la calle Blasdel Rd. Actualmente esta parcela no tiene dirección.

Determinación para Completar: La solicitud ha sido declarada completa para el propósito de procesamiento.

Notificación: Este aviso ha sido publicado en Franklin County Graphic, La Voz y en SEPA Register.

Reunión Pública: se llevará a cabo una reunión pública para discutir el proyecto, solicitar comentarios de las personas interesadas y para responder a las preguntas relacionadas al proyecto durante la **Reunión de la Comisión de Planificación**, programada para el **10 de enero de 2023 a las 6:30 p.m.** en la Sala de Comisionados dentro del Edificio de Tribunales del Condado de Franklin en 1016 N. 4th Ave., Pasco, WA 99301.

Período de Comentarios Públicos: los comentarios tocantes a SEPA deben enviarse al Departamento de Planificación y Construcción del Condado de Franklin antes de las **4:30 p.m. del 29 de diciembre de 2022**. Solamente los comentarios recibidos antes de dicha fecha se incluirán en el registro de anotación de SEPA. Los comentarios por-escrito pertinentes al proyecto deben ser entregados antes de las **12:00 p.m. del 3 de enero de 2023** para que se incluyan en el Paquete de la Comisión de Planificación. Si tiene alguna pregunta sobre la propuesta, comuníquese con el Departamento de Planificación del Condado de Franklin al 509-545-3521 o por correo electrónico a planninginquiry@franklincounty.wa.gov.

Documentos o Estudios Ambientales Aplicables a esta Solicitud: Se le ha asignado la Determinación Ambiental **No. SEPA 2022-29 a esta propuesta**. El período de comentarios de SEPA finalizará el **29 de diciembre de 2022**. Es probable que se emita una Determinación No-Significativa o Determinación Mitigada No-Significativa para esta propuesta (WAC 197-11-355). Esta puede ser la única oportunidad para comentar sobre los impactos ambientales de esta propuesta o para apelar cualquier decisión relacionada con la Ley de Normas Ambientales del Estado. Puede obtener una copia de la determinación posterior y cualquier información relacionada con esta acción comunicándose con el Departamento de Planificación y Construcción del Condado de Franklin.

Determinación Preliminar de Reglamentos Utilizados para la Mitigación del Proyecto:

- Las provisiones contenidas en el Código del Condado de Franklin y las pólizas de uso de terrenos del Plan Integral del Condado de Franklin.
- Reglamentos del Departamento de Pesca y Vida Silvestre del Estado de Washington, Departamento de Ecología del Estado de Washington y Departamento de Recursos Naturales del Estado de Washington.
- Otras evaluaciones, aprobaciones, permisos y mitigaciones requeridas por la agencia, según sea necesario.

Permisos requeridos: Se requerirán permisos de construcción para cualquier construcción o colocación de estructuras.

Cómo Participar por Internet: puede ver el procedimiento ingresando YouTube Live, seleccionando la página de la agenda del Condado de Franklin, WA en <https://www.franklincountywa.gov/AgendaCenter/Planning-Commission-2>. Para participar por internet, se publicará más información en la página de la agenda, antes del viernes anterior a la reunión.

Fecha Aproximada de la Determinación: se emitirán DNS o MDNS después que termine la audiencia pública sobre el asunto el 10 de enero de 2023.

Para Recibir Notificación de la Determinación Ambiental: Comuníquese con el Departamento de Planificación del Condado de Franklin en la dirección o el número de teléfono en la parte de debajo de esta página.

Apelaciones: puede apelar la determinación enviando una apelación a la dirección que se indica a continuación dentro de los 10 días posteriores a la emisión. La apelación debe presentarse por-escrito, contener una declaración concisa del asunto que se apela y la justificación básica de la apelación. Todos los comentarios o apelaciones deben dirigirse al Departamento de Planificación y Construcción del Condado de Franklin, 502 W. Boeing St., Pasco, WA 99301. Puede encontrar más información sobre el proceso de apelación en el Código del Condado de Franklin (FCC) 18.04.280.

Preparado el 15 de diciembre de 2022 por: Aaron Gunderson, Planner I, 502 W. Boeing St., Pasco, WA 99301 (509) 545-3521



PLANNING AND BUILDING DEPARTMENT

NOTICE OF OPEN RECORD PUBLIC HEARING/SEPA DETERMINATION (Optional DNS Process)

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SEPA Comment Period Deadline: December 29, 2022

Proposal: Allow for the expansion of the City of Pasco's Process Water Reuse Facility (PWRf). Expansion consists of three (3) phases. This proposal is for phase 2 of the project, which is the provision of additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment.

Location:

PWRf phase 2 improvements are on Parcel #113-090-058. These properties are located: East of HWY 395, North of East Foster Wells Rd., and West of Blasdel Rd. This parcel currently has no address.

Determination of Completeness: The application has been declared complete for the purpose of processing.

Notification: This notice has been posted in the Franklin County Graphic, La Voz and the SEPA Register.

Public Meeting: A public meeting will be held to discuss the project, solicit input from interested citizens, and respond to project questions at the Planning Commission Meeting, scheduled for **6:30 PM, January 10, 2023**, in the Commissioner's Room at the Franklin County Courthouse at 1016 N. 4th Ave., Pasco, WA 99301.

Public Comment Period: SEPA comments must be submitted to the Franklin County Planning & Building Department by **4:30 PM** on **December 29, 2022**. Only comments received by the referenced date will be included in the SEPA record. Written project comments must be submitted by **12:00 PM** on **January 3, 2023** to be included in the Planning Commission Packet. If there are any questions on the proposal, contact the Franklin County Planning Department at 509-545-3521 or via email at planninginquiry@franklincounty.wa.gov.

Environmental Documents and/or Studies Applicable to this Application: Environmental Determination **No. SEPA 2022-29** has been assigned to this proposal. The SEPA comment period will end on **December 29, 2022**. It is probable that a Determination of Non-Significance or Mitigated Determination of Non-Significance will be issued for this proposal (WAC 197-11-355). This may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions. A copy of the subsequent threshold determination and any information concerning this action may be obtained by contacting the Franklin County Planning & Building Department.

Preliminary Determination of Regulations Used for Project Mitigation:

- The provisions contained in the Franklin County Code and the land use policies of the Franklin County Comprehensive Plan.
- Regulations of the Washington State Department of Fish and Wildlife, Washington State Department of Ecology, and Washington State Department of Natural Resources.
- Other required agency evaluations, approvals, permits, and mitigations as necessary.

Required Permits: Building permits will be required for any construction or placement of structures.

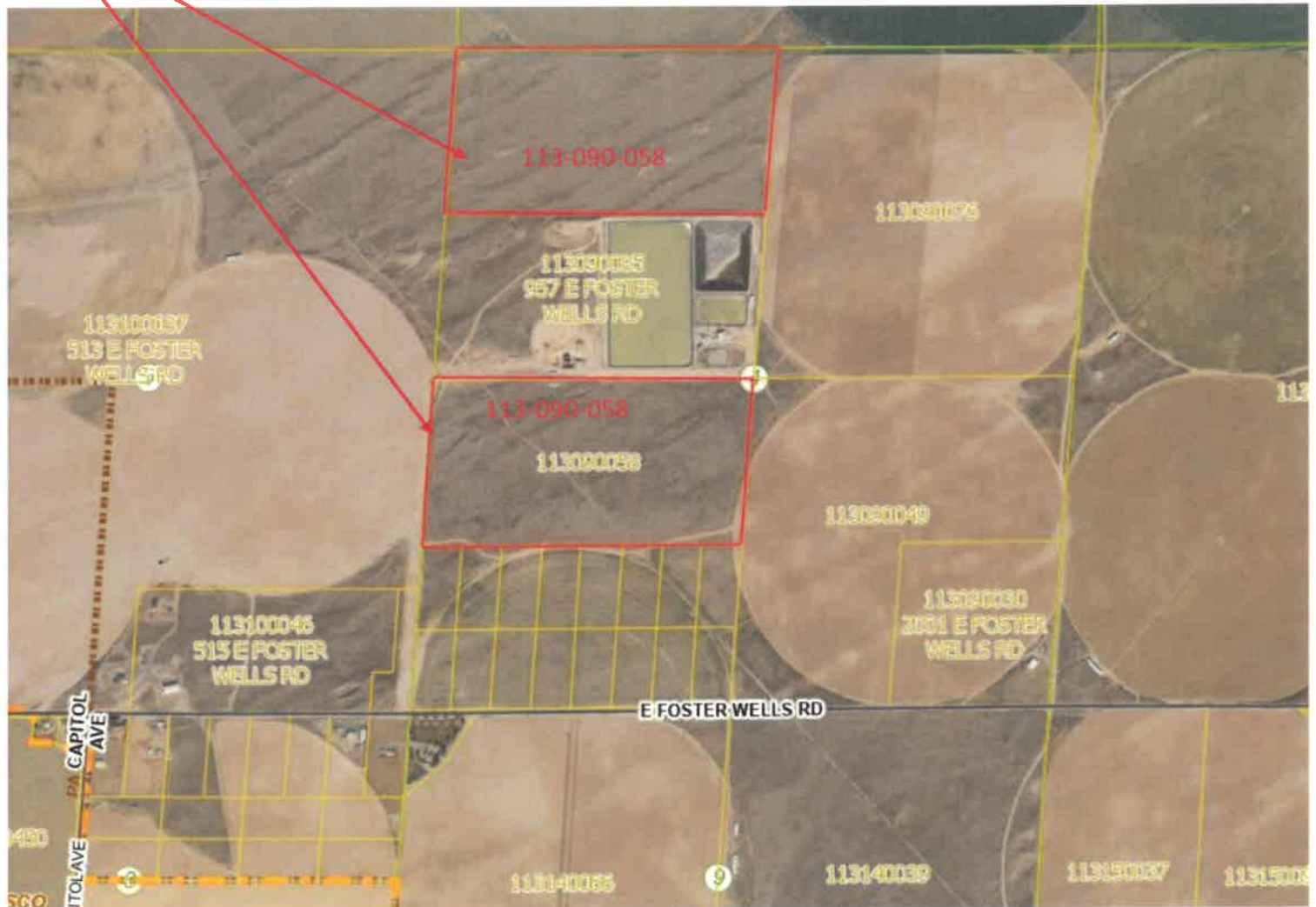
How to Watch/Participate Online: You can watch the proceeding on YouTube Live, by going to the Franklin County, WA agenda page at <https://www.franklincountywa.gov/AgendaCenter/Planning-Commission-2>. To participate online, more information will be posted to the agenda page, by the Friday proceeding the meeting.

Estimated Date of the Determination: DNS or MDNS will be issued following the close of the public hearing on the item on **January 10, 2023**.

To Receive Notification of the Environmental Determination: Contact the Franklin County Planning Department at the address or telephone number below.

Appeals: You may appeal the subsequent threshold determination by submitting an appeal to the address below within 10 days of issuance. The appeal must be in written form, contain a concise statement of the matter being appealed and the basic rationale for the appeal. All comments or appeals are to be directed to the Franklin County Planning & Building Department, 502 W. Boeing St., Pasco, WA 99301. More information on the appeal process is contained in Franklin County Code (FCC) 18.04.280.

Prepared December 15, 2022 by: Aaron Gunderson, Planner I, 502 W. Boeing St., Pasco, WA 99301 (509) 545-3521

SUBJECT PARCEL



PLANNING AND BUILDING DEPARTMENT

AVISO DE AUDIENCIA PÚBLICA/DETERMINACIÓN DE 'SEPA' (Proceso Opcional de DNS)

POR LA PRESENTE SE DA AVISO que se ha propuesto una solicitud por parte de **RH2 Engineering, Inc.**, a la Comisión de Planificación del Condado de Franklin en nombre de la **Ciudad de Pasco** 525 N. 3rd Ave., Pasco, WA 99301, que busca la aprobación del Permiso de Uso Condicional (CUP, por sus siglas en inglés), archivo # **CUP 2022-10**.

Plazo para recibir comentarios pertinentes a SEPA: 29 de diciembre de 2022

Propuesta: Permitir la expansión de la Instalación de Reutilización de Agua de Proceso (PWRP, por sus siglas en inglés) de la Ciudad de Pasco. La expansión consiste de tres (3) fases. Esta propuesta es para la fase 2 del proyecto, la cual es la provisión de almacenamiento de invierno adicional a través de lagunas propuestas en parcelas de propiedad de la Ciudad y en parcelas de propiedad de Recuperación, y establece un sitio de construcción para el pretratamiento futuro.

Ubicación:

Los mejoramientos de la fase 2 de PWRP aparecen en la Parcela N° 113-090-058. Estas propiedades están ubicadas: al este de la carretera HWY 395, al norte de calle East Foster Wells Rd. y al oeste de la calle Blasdel Rd. Actualmente esta parcela no tiene dirección.

Determinación para Completar: La solicitud ha sido declarada completa para el propósito de procesamiento.

Notificación: Este aviso ha sido publicado en Franklin County Graphic, La Voz y en SEPA Register.

Reunión Pública: se llevará a cabo una reunión pública para discutir el proyecto, solicitar comentarios de las personas interesadas y para responder a las preguntas relacionadas al proyecto durante la Reunión de la Comisión de Planificación, programada para el **10 de enero de 2022 a las 6:30 p.m.** en la Sala de Comisionados dentro del Edificio de Tribunales del Condado de Franklin en 1016 N. 4th Ave., Pasco, WA 99301.

Período de Comentarios Públicos: los comentarios tocantes a SEPA deben enviarse al Departamento de Planificación y Construcción del Condado de Franklin antes de las **4:30 p.m. del 29 de diciembre de 2022**. Solamente los comentarios recibidos antes de dicha fecha se incluirán en el registro de anotación de SEPA. Los comentarios por-escrito pertinentes al proyecto deben ser entregados antes de las **12:00 p.m. del 3 de enero de 2022** para que se incluyan en el Paquete de la Comisión de Planificación. Si tiene alguna pregunta sobre la propuesta, comuníquese con el Departamento de Planificación del Condado de Franklin al 509-545-3521 o por correo electrónico a planninginquiry@franklincounty.wa.gov.

Documentos o Estudios Ambientales Aplicables a esta Solicitud: Se le ha asignado la Determinación Ambiental **No. SEPA 2022-29 a esta propuesta**. El período de comentarios de SEPA finalizará el **29 de diciembre de 2022**. Es probable que se emita una Determinación No-Significativa o Determinación Mitigada No-Significativa para esta propuesta (WAC 197-11-355). Esta puede ser la única oportunidad para comentar sobre los impactos ambientales de esta propuesta o para apelar cualquier decisión relacionada con la Ley de Normas Ambientales del Estado. Puede obtener una copia de la determinación posterior y cualquier información relacionada con esta acción comunicándose con el Departamento de Planificación y Construcción del Condado de Franklin.

Determinación Preliminar de Reglamentos Utilizados para la Mitigación del Proyecto:

- Las provisiones contenidas en el Código del Condado de Franklin y las pólizas de uso de terrenos del Plan Integral del Condado de Franklin.
- Reglamentos del Departamento de Pesca y Vida Silvestre del Estado de Washington, Departamento de Ecología del Estado de Washington y Departamento de Recursos Naturales del Estado de Washington.
- Otras evaluaciones, aprobaciones, permisos y mitigaciones requeridas por la agencia, según sea necesario.

Permisos requeridos: Se requerirán permisos de construcción para cualquier construcción o colocación de estructuras.

Cómo Participar por Internet: puede ver el procedimiento ingresando YouTube Live, seleccionando la página de la agenda del Condado de Franklin, WA en <https://www.franklincountywa.gov/AgendaCenter/Planning-Commission-2>. Para participar por internet, se publicará más información en la página de la agenda, antes del viernes anterior a la reunión.

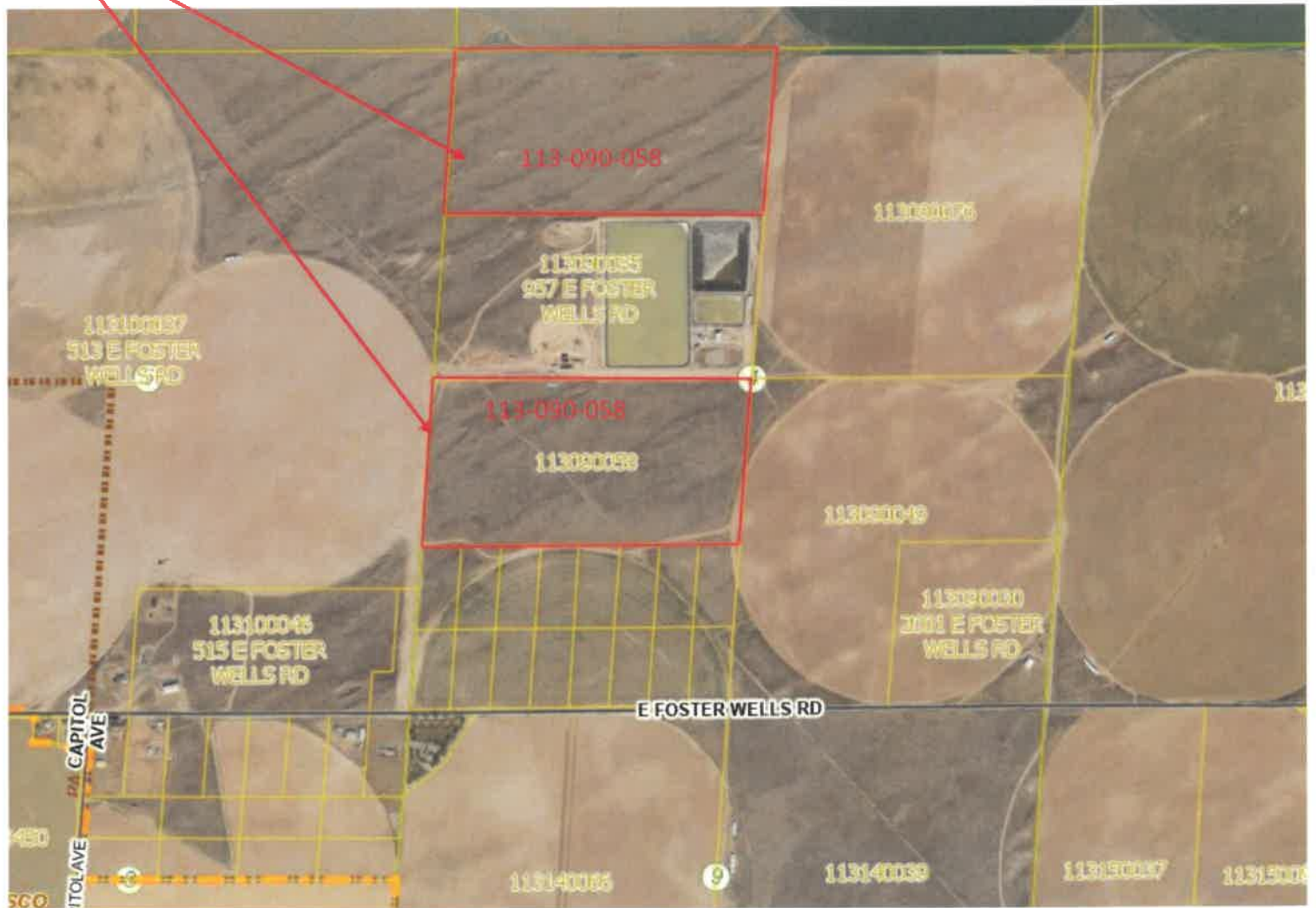
Fecha Aproximada de la Determinación: se emitirán DNS o MDNS después que termine la audiencia pública sobre el asunto el **10 de enero de 2022**.

Para Recibir Notificación de la Determinación Ambiental: Comuníquese con el Departamento de Planificación del Condado de Franklin en la dirección o el número de teléfono en la parte de debajo de esta página.

Apelaciones: puede apelar la determinación enviando una apelación a la dirección que se indica a continuación dentro de los 10 días posteriores a la emisión. La apelación debe presentarse por-escrito, contener una declaración concisa del asunto que se apela y la justificación básica de la apelación. Todos los comentarios o apelaciones deben dirigirse al Departamento de Planificación y Construcción del Condado de Franklin, 502 W. Boeing St., Pasco, WA 99301. Puede encontrar más información sobre el proceso de apelación en el Código del Condado de Franklin (FCC) 18.04.280.

Preparado el 15 de diciembre de 2022 por: Aaron Gunderson, Planner I, 502 W. Boeing St., Pasco, WA 99301 (509) 545-3521

PARCELA



Agenda Item #1

APPLICATION, SEPA DETERMINATION & SEPA CHECKLIST

CUP 2022-10

RH2 Engineering, Inc. – Process Water Reuse Facility

FRANKLIN COUNTY, WASHINGTON
STATE ENVIRONMENTAL POLICY ACT (SEPA)
MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)

Description of proposal:

Application is to allow for the expansion of the City of Pasco's Process Water Reuse Facility (PWRF). Expansion consists of three (3) phases. This proposal is for phase 2 of the project, which is the provision of additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment.

File Number: SEPA 2022-29 (CUP 2022-10)

Proponent: RH2 Engineering, Inc., Alicia Pettibone as Agent Representative

Location: PWRF phase 2 improvements are on Parcel #113-090-058. These properties are located: East of HWY 395, North of East Foster Wells Rd., and West of Blasdel Rd. This parcel currently has no address.

Legal Description: Please contact department for complete legal description.

Lead Agency: Franklin County, Washington

Findings:

1. Earth (grading) impacts:
 - a. Soil Erosion: There is minimal potential of soil erosion due to the minimal elevation of slopes.
 - b. Dust : Topsoil will be removed, which could result in a nuisance and result in impacts due to fugitive dust if not properly managed.
2. Air quality impacts:
 - a. Short-term: There will be impacts to air quality from construction.
 - b. Long-term: There will be impacts to air quality from equipment.
3. Transportation impacts: This proposal will result in additional vehicle trips to, from, and within the development site.
4. Impacts to surrounding land uses: There are potential impacts to surrounding land uses by increased traffic, noise and dust on a short-term basis from construction activities and on a long basis from workers visiting the site.
5. Aesthetic impacts: There are no impacts on aesthetics.
6. Public service impacts: Development will result in minimal increase to public services. Mostly due to increase in work traffic to and from site.
7. Stormwater impacts: There will be minimal impacts from stormwater run-off. This is due to various safeguards proposed by the applicant in the SEPA checklist.

Mitigation Measures:

1. Apply for and obtain a Franklin County Conditional Use Permit for land use approval.
2. If land use approval is granted by Franklin County, the applicant shall:

- a) Comply with all conditions of the Franklin County Conditional Use Permit.
 - b) Apply for Franklin County Building Permit for fence and structures.
 - c) Comply with the Washington State Department of Ecology's applicable permit requirements.
3. Nothing in the MDNS shall excuse the applicant from complying with all other local, state and Federal regulations pertaining to this development.

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This MDNS is issued under WAC 197-11-350; the lead agency will not act on this proposal for 14 days from the date of publication (December 15, 2022). Comment must be submitted by: **December 29, 2022**.

Responsible Official: *Derrick Braaten*

Position/Title/Phone: *Planning and Building, Director – (509) 545-3521*

Address: *502 W. Boeing St., Pasco, WA 99301*

Date/Signature: 12/15/2022 -



Any agency or person may appeal this SEPA determination by filing a written appeal to the responsible official no later than **December 29, 2022**. Contact the responsible official to read or ask about the procedure for SEPA appeals.

SEPA ENVIRONMENTAL CHECKLIST

A. Background

1. Name of proposed project, if applicable:

Process Water Reuse Facility (PWRf) Improvements Project

2. Name of applicant:

City of Pasco (City)

3. Address and phone number of applicant and contact person:

Maria Serra, PE
City of Pasco Public Works
525 North Third Avenue
Pasco, WA 99301
(509) 544-4125

4. Date checklist prepared:

October 5, 2022

5. Agency requesting checklist:

Franklin County Planning and Building Department, Washington State Department of Ecology
(Ecology)

6. Proposed timing or schedule (including phasing, if applicable):

PWRf Improvements are planned to occur in the following phases:

- Phase 1 extends City water for both drinking supplies and fire protection and realigns power/fiber to the existing PWRf facilities. Construction is occurring in summer 2022 through spring 2023. Phase 1 completed City SEPA review in 2021 (SEPA2021-085).
- Phase 2 will construct additional winter storage through proposed lagoons on the north half of parcel no. 113090058. Construction is scheduled for spring 2023 through spring 2024.
- Phase 3 will construct the PWRf pretreatment improvements, primarily on the west half of parcel no. 113090085. Construction is scheduled for winter 2022/2023 and expected to require 2 years. Phase 3 is being designed, constructed, and operated by Burnham SEV Pasco, LLC, (BurnhamSEV); consequently, this phase is being permitted separately from the other PWRf improvements. A separate SEPA Checklist and Conditional Use Permit (CUP) process was initiated for the Phase 3 improvements in early August 2022, and is being processed by Franklin County (County).

- Future expansion of the PWRF is detailed in the next section. Currently, there is no schedule for the future expansion as it is dependent on processor demands and other operational constraints.

Figure 1 shows a project area map depicting the parcels involved in the project improvements.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Future expansion of the PWRF could occur on the southern half of parcel no. 113090058. The City is acquiring this parcel from the United States Bureau of Reclamation (Reclamation) and anticipates transfer of ownership near the end of 2022. As currently conceptualized, expansion of the PWRF on this parcel could construct up to 3 additional winter storage lagoons: 63-million-gallon (MG), 85 MG, and 100 MG depending on future processor demand. All wastewater from the lagoons would need to be pumped through a proposed pump station to the existing Irrigation Pump Station (IPS) or to the City's Land Treatment System (LTS) that provides irrigation water for neighboring parcels. This expansion could add an additional 248 MG of winter storage capacity to the PWRF.

The City is acquiring Reclamation parcel no. 113140039, which is southeast of the PWRF. This 160-acre primarily undeveloped shrub-steppe parcel is anticipated to be cleared, graded, and converted to cropland as part of the City's LTS under Phase 2 or 3, or future expansion.

To the extent that improvements have been defined on the southern half of parcel no. 113090058, and parcel no. 113140039, they have been included in this Checklist. If improvements planned significantly change from the concepts analyzed in this SEPA Checklist, individual project SEPA reviews could be needed for these future expansions.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Because the PWRF is an existing facility and growth has driven several improvements to the PWRF process system, several background documents exist related to previous improvements and the current PWRF improvements, including the following.

Existing Documents

General

- *Phase 1 Environmental Site Assessment, Process Water Reuse Facility Parcels*, prepared by RH2 Engineering, Inc., (RH2), Draft, September 2022.
- *Process Water Reuse Facility Engineering Report*, prepared by RH2 and Valley Science and Engineering, August 2022.
- *Process Water Reuse Facility Improvements Biological Survey Report*, prepared by RH2, August 2022.
- *Technical Memorandum Cultural Resources Assessment for the PWRF Improvements Project, Pasco, Franklin County, Washington*, prepared by Cultural Resource Consultants, Inc., (CRC), July 26, 2022.

- *Technical Memorandum PWRF Endangered Species Act Listed Species and Critical Habitats*, prepared by RH2, July 2022.
- *Feeding the Future – City of Pasco, Washington*, prepared by the Center for Sustainable Agriculture and Natural Resources, Washington State University, 2021.
- *Technical Memorandum PWRF Value Engineering Study*, prepared by RH2, Draft, March 2020.
- PWRF Facility Plan SEPA, prepared September 2018, and Determination of Non-Significance (DNS) issued December 2019 by the City (SEPA2019-058).
- *Process Water Reuse Facility Capital Facilities Plan/Engineering Report*, prepared by PACE Engineers, Inc., (PACE), November 2019.
- *2019 Wastewater Treatment Plant Facility Plan, City of Pasco*, prepared by MurraySmith, July 2019.
- *Kahlotus Highway Sewer Force Main Alternatives Evaluation Report*, prepared by BergerABAM, September 2017.
- *Technical Memorandum Endangered Species Act – No Effect Determination Alternatives Analysis for Kahlotus Highway Sewer Force Main*, prepared by BergerABAM, December 2017.
- *Emergency Action Plan for the Pasco Process Industrial Wastewater System and Pasco Process Water Reuse Storage Lagoon*, prepared by the City of Pasco, June 2016.
- *2016 Farm Operations Report, City of Pasco*, prepared by Cascade Earth Sciences, Inc., April 2016.
- *Report of Geotechnical Evaluation and Embankment Stability Analyses for the City of Pasco – Dam Safety Compliance Process Water Reuse Facility*, prepared by GN Northern, Inc., October 2015.

PWRF Phase 1

- PWRF Improvements Project, Phase 1: Potable Water and Power SEPA, prepared October 2021, and Mitigated DNS (MDNS) issued November 2021 by the City Planning Division (SEPA File 2021-085).
- *Technical Memorandum Cultural Resources Overview for the PWRF Phase 1 Project, Pasco, Franklin County, Washington*, prepared by CRC, September 20, 2021.
- *Technical Memorandum PWRF Environmental Justice Documentation*, prepared by RH2, Draft, November 24, 2021.

PWRF Phase 2

- *Technical Memorandum PWRF Environmental Justice Documentation – Revised*, prepared by RH2, forthcoming.
- *Process Water Reuse Facility Phase 2 Engineering Report*, prepared by RH2, forthcoming.

- *Technical Memorandum PWRF Phase 2 – Winter Storage Alternative Analysis*, prepared by RH2, June 24, 2022.
- Columbia East Force Main SEPA, prepared August 2019, and DNS issued September 2019 by the City (SEPA2019-043).
- *Columbia East Force Main Environmental Assessment*, completed by the Economic Development Administration (EDA), May 2019, with Finding of No Significant Impact (FONSI) issued in 2019.
- Columbia East Pump Station SEPA, prepared August 2018, and DNS issued August 2018 by the City (SEPA2018-036).
- *Geotechnical Engineering Report for the Columbia East Lift Station*, prepared by Shannon & Wilson, Inc., August 6, 2018.
- *Columbia East Regional Industrial Pump Station Engineering Report*, prepared by PACE, November 2017.

PWRF Phase 3

- Pasco Resource Recovery Center (PRRC) SEPA and CUP application packaged, prepared by BurnhamSEV, August 2022, with MDNS issued August 25, 2022 (County File Nos. SEPA 2022-24 and CUP 2022-08).

Foster Wells Force Main

- Foster Wells Force Main SEPA, prepared April 2019, and DNS issued May 2019 by the City (SEPA 2019-020).

PWRF Irrigation Pump Station

- *Technical Memorandum PWRF Plant Irrigation Pump Station Replacement*, prepared by PACE, June 2019.
- PWRF Irrigation Pump Station SEPA, prepared October 2018, and MDNS issued February 2019 by Franklin County (SEPA File 2019-02).
- *Geotechnical Design Memo – Irrigation Pump Station, City of Pasco, Washington*, prepared by CH2M Hill Engineers, Inc., June 14, 2018.

To Be Prepared

Future PWRF improvements will include preparation of geotechnical, stormwater, and project reports. Additional environmental documentation may be prepared for compliance with permitting processes, including the National Environmental Policy Act (NEPA) through Reclamation and the State Environmental Review Process (SERP) through Ecology. The proposed project must complete SERP as a condition of the Clean Water State Revolving Fund (CWSRF) funding. The City also has received pre-construction funding from the Public Works Board.

A cultural resources and biological survey and subsequent reporting is anticipated to be completed in late 2022/spring 2023 for the southeast parcel improvements to facilitate Reclamation land acquisition and local permitting.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

The PRRC (Phase 3 improvements) SEPA and CUP process is underway with the County.

Through the acquisition of Reclamation land, the City is working with Reclamation to satisfy NEPA compliance for the project, which includes the following pending processes:

- Section 106 of the National Historic Preservation Act (NHPA).
- Section 7 of the Endangered Species Act (ESA).
- Phase 1 Environmental Site Assessment and hazardous materials clearance.
- Appraisal and realty approvals.

The City is purchasing the 80-acre parcel no. 124710063 east of and adjacent to parcel no. 124710054 (owned by Reclamation and being purchased by the City), which is currently owned by Voss Farms Ltd Partnership (Voss) and used to grow crops. It is anticipated that earth excavated for the winter storage lagoons in Phase 2 will be spread on these two northeast parcels and they will be combined into one 160-acre full plot circle of cropland, receiving PWRF process water as part of the City's LTS.

10. List any government approvals or permits that will be needed for your proposal, if known.

This SEPA will be processed along with a CUP through the County. Additional approvals needed for the PWRF Improvements project include the following.

- NEPA Compliance, anticipated to be a Categorical Exclusion type – Reclamation
- SERP Compliance – Ecology, including the following components:
 - Section 106 NHPA Cultural Resources Review.
 - Environmental Justice (EJ) Review.
 - Environmental (SEPA) Review.
 - Public participation/engagement.
 - Compliance with applicable federal cross cutters (e.g., Clean Air Act, ESA, etc.).
- Building and Land Development Permits – County
- Dam Safety and Construction Stormwater General Permit (CSWGP) – Ecology

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal.

The City owns and operates the PWRF, an industrial wastewater treatment facility, located just north of the City limits and east of State Route (SR) 395 in the County. The PWRF was constructed in 1995 to manage process wastewater from various food processors in the region. Process wastewater is treated, stored, and then land applied as irrigation water to nearby leasehold farmers. The PWRF stores process wastewater in on-site lagoons during the winter and pumps both new and stored process wastewater for irrigation in the spring, summer, and fall. The City is proposing expansion of and improvements to the PWRF, which are necessitated by the expansion of existing processors and the addition of new processors to the area, including Reser's Fine Foods and Darigold, Inc. The City also will be adding

FCP (11-16-2022):
Hwy 395 is a U.S.
Highway, not a
State Route.

U.S. Hwy 395 runs
from the Canadian
border in eastern
Washington State
to Southern
California.

pretreatment to the facility to improve water quality for land application (Phase 3 improvements, i.e., the PRRC).

The primary facility improvements for the PWRF Improvements project are proposed on two parcels: 1) parcel no. 113090085 is currently owned by the City and includes the existing PWRF in the eastern half; and 2) parcel no. 113090058 borders the existing PWRF to the north and south. Grading from construction of the PWRF Improvements is anticipated to occur on parcel nos. 124710054 and 124710063, which are approximately 1 mile to the northeast. Parcel nos. 113090058 and 124710054 are owned by Reclamation and will be conveyed through quitclaim to the City in association with this project. Parcel no. 124710063 is cropland, presently owned by Voss, and will be purchased by the City, graded with earth from PWRF winter storage lagoon construction, and returned to cropland for land application of PWRF process wastewater. Improvements on the southern half of parcel no. 113090058 are anticipated to occur in the future. Similarly, a third Reclamation parcel, which would be four total plots of land purchased from Reclamation, is planned to be acquired by the City for the future expansion of the PWRF Improvements (parcel no. 113140039).

Figure 2 shows a conceptual proposed site plan for the immediate PWRF Improvements (Phases 2 and 3). A complete description of each currently planned PWRF Improvements project phase follows.

Phase 2

Phase 2 provides approximately 329 MG of additional winter storage to the PWRF through proposed lagoons on the north half of parcel no. 113090058. Phase 2 also involves the installation of various sizes (ranging from 6- to 42-inch diameter) and types (e.g., high density polyethylene (HDPE), polyvinyl chloride (PVC), etc.) of utilities, including drain lines, force mains, power, water, and sewer lines, etc., primarily intended to connect the new winter storage ponds to the existing PWRF facility and the proposed PRRC. A small (approximately 200 square feet (sf)), prepackaged, below-grade lift station with submersible pump and an above-grade electrical panel also will be constructed for washdown of storage ponds. It is anticipated that earth from the winter storage lagoon construction could be used to establish grades for the PRRC as part of Phase 3. Earth movement is planned to occur on parcel nos. 113090085 (to fill the existing 5 MG pond), 124710054, and 124710063 as part of the Phase 2 construction work.

Phase 3

Phase 3 will construct the PRRC, which includes pretreatment improvements to effectively replace and improve the current treatment functions of the active PWRF. Major components include a new headworks for primary screening and grit removal and two anaerobic digesters that will significantly reduce the biological oxygen demand in the process wastewater. A proposed Rotating Algae Biofilm (RAB) system will help remove nitrogen. This pretreatment will generate significant biogas that will be captured and used as a renewable energy source. Renewable natural gas will be pumped back to the energy grid through a gas main extending from the pretreatment site to an off-site interconnected facility (connected ultimately to facilities owned and operated by Cascade Natural Gas). These improvements are being designed, constructed, and operated by BurnhamSEV under a long-term contract with the City. The PRRC SEPA and CUP application files, submitted to the County in early August 2022, detail these improvements further.

Future Expansion

There is no schedule or concrete proposal for the future expansion of the PWRF because it is dependent on processor demands and other operational constraints.

As currently conceptualized, future phases of the project could include expansion of the PWRF to the south half of parcel no. 113090058, including construction of additional winter storage basins, pump station, and utilities. This expansion could add an additional approximately 248 MG of winter storage capacity to the PWRF. **Figure 3** shows the conceptual proposed site plan that includes the southern half of this parcel.

The 160-acre parcel no. 113140039 to the southeast could be cleared, graded, and converted to cropland as part of the City's LTS. This earthwork and land conversion is anticipated to occur in a future expansion of the PWRF.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available.

The existing PWRF facility is in unincorporated Franklin County, located at 957 East Foster Wells Road, Pasco, Washington. Proposed improvements to the PWRF are anticipated to occur on parcel nos. 113090085 and 113090058. Earth movement and cropland conversion will involve parcel nos. 124710054 and 124710063. Future expansion of the PWRF could include the southern half of parcel no. 113090058 and parcel no. 113140039. **Figure 1** shows these parcels.

Parcel no. 113090058 consists of the divided parcel that abuts parcel no. 113090085 on its north and south sides and will be referred to as the north parcel and south parcel, respectively, hereafter. Parcel no. 124710054, approximately 1 mile northeast of the PWRF, and parcel no. 113140039, approximately ½ mile southeast of the PWRF, will be referred to as the northeast and southeast parcels, respectively. Parcel no. 124710063, east of the northeast parcel will be referred to as the Voss parcel. The 40-acre west half of parcel no. 113090085 that is owned by the City will be referred to as the City parcel.

The south, north, and City parcels are in Section 4 of Township 9 North and Range 30 East. The northeast and Voss parcels are in Section 34 of Township 10 North and Range 30 East. The southeast parcel is in Section 9 of Township 9 North and Range 30 East.

B. Environmental Elements

1. Earth

- a. General description of the site: circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____
- b. What is the steepest slope on the site (approximate percent slope)?

The site is mostly flat with some rolling hills. The steepest slopes are approximately 45-percent slopes associated with graded areas on the northwest corner of the existing PWRF site.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

According to the Natural Resources Conservation Service (NRCS) soil survey data, the project area is primarily within the Quincy loamy fine sand, 0 to 15 percent slopes, soil map unit, which is comprised of an excessively drained loamy fine sand that develops on terraces from mixed eolian sands. This soil map unit is classified as a farmland of statewide importance and is not hydric. The project area also contains the Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes, soil map unit, which shares many features but is found atop a silt loam layer that is 52 to 60 inches below the surface.

The project area also contains the Royal fine sandy loam, 0 to 2 percent slopes, soil map unit, which is comprised of a well-drained fine sandy loam that forms on terraces from sandy alluvium. This soil map unit is classified as prime farmland if irrigated and is not hydric.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None known.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The purpose of the proposed excavation, fill, and grading will be for the construction of new winter storage lagoons, pretreatment facilities, and associated utility and transmission lines. Construction also will include installation of bedding and backfill in trenches, concrete foundation work for buildings, and restoration of some affected areas to pre-construction conditions. The northeast and southeast parcels are anticipated to be graded and converted to cropland; however, definitive plans and timing are unknown presently. The total project footprint, including the northeast, Voss, and southeast parcels, is roughly 560 acres.

PWRF Phase 2 will require excavation and grading for construction of 3 winter storage lagoons on the north parcel, each with a capacity between 100 MG and 120 MG. Phase 2 will require approximately 1,419,000 cubic yards (cy) of cut and approximately 132,500 cy of fill, for net cut of 1,286,500 cy. It is anticipated approximately 200,000 cy of cut material from Phase 3 will be used to establish grades for the Phase 3 PRRC, approximately 60,000 cy will be used to fill the existing 5 MG pond on the City's PWRF property, and approximately 1 million cy will be applied to the northeast and Voss parcels. For Phase 2, native material will be used for lagoon embankment construction and up to 20,000 cy of crushed rock import is anticipated to be needed for access roads and pipe bedding. Phase 2 will require excavation over a total area of approximately 80 acres, and application of fill material over approximately 200 acres.

Future expansion to the south parcel could involve approximately 997,400 cy of cut and 209,600 cy of fill; however, these numbers are preliminary and dependent on final plans for this parcel.

Phase 3 will include excavation, fill, and grading for construction of the PRRC on the west half of the City parcel. Earthwork quantities are detailed in the Phase 3 PRRC SEPA/CUP files (County File Nos. SEPA 2022-24 and CUP 2022-08).

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

As most of the project will occur within areas of gentle slopes, the risk of erosion from project construction is generally low. Erosion from wind is most likely to occur during construction in this area. Construction will be required to employ temporary erosion and sedimentation control (TESC) Best Management Practices (BMPs) to prevent and manage temporary impacts from erosion and dust.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Proposed PWRF Improvements detailed in this Checklist focus on Phase 2 and future expansion improvements to the extent they are known.

Phase 2 will construct winter storage basins on the north parcel and will convert approximately 70 acres of land, or 90 percent, to impervious surface (this assumes that winter storage lagoons will be lined and access roads will be constructed of gravel).

Impervious surfaces for Phase 3 are detailed in that SEPA Checklist.

The northeast, Voss, and southeast parcels are anticipated to be part of the LTS, which would not involve construction of impervious surfaces. There are no buildings or significant impervious surfaces planned for these parcels.

Future expansion on the south parcel conceptually includes construction of three additional winter storage lagoons, a pump station, and utility installation. An estimated 65 acres of land could be converted to impervious surfaces for these improvements, or 80 percent of land (assuming pond liners and access roads will be constructed of gravel).

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

BMPs anticipated to be utilized during construction could include, but are not limited to, constrained construction limits, securing temporary stockpiles and slopes, silt fence, straw wattles, water application for dust, hydroseeding, daily site cleanup, and an on-site Certified Erosion and Sediment Control Lead. Construction stormwater BMPs shall meet the requirements of the County, Ecology, and the Franklin Conservation District (FCD).

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Minor temporary exhaust and dust emissions from construction equipment and vehicles are anticipated during construction. The completed Phase 2 portion of the project will not produce emissions. Phase 3 is anticipated to involve emissions associated with the renewable gas

facility. This phase is documented in a separate SEPA Checklist. Future expansion on the south parcel also would include temporary exhaust and dust emissions during construction. The additional pump station conceptualized as part of that parcel's development could involve emissions from gas- or diesel-fueled equipment; however, those details are largely unknown at this time.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

The existing PWRP produces unpleasant odors at times, which is primarily due to the facility's current insufficient pretreatment process. The facility's existing clarifier is undersized and is unable to effectively remove biosolids from process water, which contributes to odors.

Phase 3 of the project includes improvements to the pretreatment process, effectively replacing the existing system, and improving and/or eliminating odor issues from the PWRP.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The proposed Phase 3 PWRP improvements will include a new pretreatment system that will mitigate the existing odor issues at the facility.

3. Water

a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There are no surface water bodies or wetlands on or within the vicinity of the PWRP site.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No Federal Emergency Management Agency mapped flood zones occur on or within proximity to the project site.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

None anticipated.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Not applicable.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The primary source of runoff in the area is from precipitation that is infiltrated into the soil or occurs as stormwater runoff. Water that infiltrates the soil intercepts the groundwater table and generally flows downhill (south) towards the confluence of the Columbia and Snake Rivers. Irrigation canals, drains, and ponds are common in the region, some of which intercept groundwater and surface water runoff from the project vicinity and land application service area.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

FCP (11-16-2022): None known

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Currently, water onsite is primarily infiltrated into soil and occurs as stormwater runoff that follows natural drainage patterns to receiving waterbodies approximately 5 miles south or to nearby irrigation drains, ponds, and canals. The proposed project will include changes in topography due to grading and new impervious surface for construction of the winter storage lagoons, pretreatment facilities, and associated utilities. New winter

storage lagoons are planned to add approximately 329 MG of storage for Phase 2 improvements and another 248 MG of storage as part of future expansion. These winter storage basins will capture rainfall and generally reduce infiltration and runoff at the site. Conversion of land from undeveloped to impervious surface for access roads and new site facilities will result in an increase in surface water runoff but will not significantly alter local drainage patterns. The northeast, Voss, and southeast parcels, which will be converted to cropland, will continue to drain as they do presently.

D. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

BMPs will be implemented to avoid and minimize potential impacts to nearby areas during project construction. Project design will be completed to adhere to applicable local, state, and federal regulations that provide standards to reduce and control impacts to surface, ground, and storm waters, and drainage patterns.

4. Plants

a. Check the types of vegetation found on the site:

- ☒ deciduous tree: alder, maple, aspen, other: Eastern cottonwood and Siberian elm
- ☐ evergreen tree: fir, cedar, pine, other:
- ☒ shrubs
- ☒ grass
- ☒ pasture
- ☒ crop or grain
- ☐ orchards, vineyards or other permanent crops.
- ☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation

The north and northeast parcels frequently are grazed by cattle and, consequently, vegetation is primarily low growing grasses and forbs. The northeast parcel contains sagebrush and rabbitbrush as well. The Voss parcel is currently active cropland. The south parcel contains grasses, native forbs, some sagebrush, rabbit-brush, and an Eastern cottonwood (*Populus deltoides*) in the northeast corner. The southeast parcel is primarily grasses, forbs, some sagebrush, rabbit-brush, and a Siberian elm (*Ulmus pumila*) in the northwest corner. The City parcel contains a predominance of weedy vegetation, with some sagebrush and rabbit-brush. Parcels surrounding the project area are radially irrigated crop lands and some cereal rye (*Secale cereale*) was present on the parcels.

b. What kind and amount of vegetation will be removed or altered?

Construction of the PWRP improvements is anticipated to remove or alter up to 440 acres of relatively undisturbed desert and shrub-steppe vegetation. Vegetation in the project area primarily consists of grasses and forbs including cheatgrass (*Bromus tectorum*), Russian thistle (*Salsola tragus*), fiddleneck (*Amsinckia spp.*), tumble mustard (*Sisymbrium altissimum*), and others, and shrubs including common rabbit-brush (*Ericameria nauseosa*), green rabbit-brush

(*Chrysothamnus viscidiflorus*), basin big sagebrush (*Artemisia tridentata ssp. tridentata*), and Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*). Vegetation structure is mostly open grasslands interspersed with various sized mosaics of sagebrush and rabbit-brush.

The northeast and Voss parcels will be graded and converted to cropland for use in land applying PWRP process wastewater. The southeast parcel is anticipated to be converted to cropland in the future expansion of the PWRP. The north and City parcels will be cleared and graded for construction of PWRP pretreatment and storage improvements. Similarly, the south parcel is anticipated to be cleared and graded for future expansion of the PWRP.

c. List threatened and endangered species known to be on or near the site.

Based on a review of Washington State Department of Natural Resources Natural Heritage data and US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) data, no threatened or endangered plant species are known to be on or near the project site. No threatened or endangered plant species were observed during biological surveys of the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Landscaping may be needed for site development depending on County permitting approvals; however, no landscaping is presently proposed. Disturbed areas that are not planned to be permanently impacted for the PWRP Improvements could receive an herbaceous seed mix for land stabilization.

The permanent loss of existing shrub-steppe habitat from conversion of functional shrub-steppe habitat on the PWRP subject parcels is expected to be mitigated at a 2:1 ratio in consultation with the Washington Department of Fish and Wildlife (WDFW) and per the County's Critical Areas Code requirements. The City and WDFW have coordinated on this front and anticipate pursuing mitigation through monetary compensation to WDFW. Total mitigation obligation is expected to be achieved through annual payments over a 10-year period. Monies allocated to mitigation may be used by WDFW to fund shrub-steppe habitat preservation or enhancement efforts in the County. Mitigation will promote the use and preservation of native plants in valuable local shrub-steppe habitats.

Additional discussion of existing vegetation on the project site and mitigation for vegetation impacts is available in the *Process Water Reuse Facility Improvements Biological Survey Report* (RH2, 2022).

e. List all noxious weeds and invasive species known to be on or near the site.

Cheatgrass, a widespread invasive species, is abundant on all parcels in the project vicinity. Kochia (*Bassia scoparia*) and rush skeletonweed (*Chondrilla juncea*), both of which are County Class B noxious weeds, and cereal rye, a County Class C noxious weed, also are present at the project site.

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other: Refer to the description that follows.
mammals: deer, bear, elk, beaver, other: Refer to the description that follows.
fish: bass, salmon, trout, herring, shellfish, other _____

During site investigations, the following wildlife species, or evidence thereof, were observed in the vicinity of the project site: red-wing black bird, house finch, western meadowlark, lark sparrow, western kingbird, mourning dove, killdeer, barn swallow, Brewer's blackbird, long-billed curlew, burrowing owl, coyote, American badger, rodents, rabbit, beetles, and spiders.

- b. List any threatened and endangered species known to be on or near the site.

According to IPaC, gray wolf, yellow-billed cuckoo, bull trout, and monarch butterfly may be present in the area. Additionally, according to the WDFW Priority Habitats and Species (PHS) map, the Washington ground squirrel and greater sage-grouse are mapped in the same township as the project. Suitable habitat for these species is not present on or in the immediate vicinity of the project site. Additional discussion is available in the *Process Water Reuse Facility Improvements Biological Survey Report* (RH2, 2022). No threatened or endangered species or their habitats are anticipated to be present on or near the site.

The northeast parcel contains suitable habitat for and confirmed presence of burrowing owl, a Washington State candidate species. This species utilizes burrows excavated by fossorial mammals for its home. One burrow with evidence of owl use (i.e. scat, feathers) has been recorded on the northeast parcel. Project design has involved coordination with WDFW to ensure that impacts to existing suitable habitat are properly avoided and minimized, and unavoidable impacts are sufficiently mitigated for.

- c. Is the site part of a migration route? If so, explain.

The project area is within the Pacific Flyway migration route; therefore, it may provide habitat for migratory bird species. USFWS data shows eight migratory species recognized as Birds of Conservation Concern may be found in the project area (e.g., lesser yellowlegs, Franklin's gull, sage thrasher, and others).

- d. Proposed measures to preserve or enhance wildlife, if any:

Mitigation for permanent loss of shrub-steppe habitat and associated impacts to sagebrush-dependent wildlife will be achieved through mitigation in coordination with WDFW and the County as described previously.

- e. List any invasive animal species known to be on or near the site.

None known.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Gasoline, oil, diesel, natural gas, and electric energy are expected to be used to fuel construction equipment for the completion of the project and to run the City's PWRP.

- b. Would your project affect the potential use of solar energy by adjacent properties?
If so, generally describe.

No. Adjacent properties to the project site are primarily radially irrigated crop circles and a cattle feedlot. The proposed project includes grading and construction of above-ground structures for the PWRP; however, these structures will not be positioned on the landscape in a way that will impact potential use of solar energy by adjacent properties.

- c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any:

Phase 3 of the project will generate biogas that will be captured and used as a renewable energy source. This phase has been further documented in the SEPA and CUP applications for the PRRC.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
If so, describe.

The proposed project involves a risk of dam breach and downstream flooding. Such risk will be documented in a report submitted to Ecology for dam safety review.

- 1) Describe any known or possible contamination at the site from present or past uses.

None known.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Construction of the project will utilize oil- and gas-fueled equipment and may require temporary fuel storage onsite. These uses do carry some risk of spill; however, the risk should be minimized with the implementation of spill control methodologies to be outlined in the project design and technical specifications in accordance with Washington State pollution control standards.

- 4) Describe special emergency services that might be required.

No special emergency services are anticipated.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

No additional measures beyond those mentioned previously. Environmental health hazards, if any, should be mitigated by meeting the requirements of the County, Ecology, and FCD during construction.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project area is approximately 2 miles northeast of the Tri-Cities Airport and airplane noise is common. Vehicle noise from SR 395 also is present 1 mile west of the project site. Traffic and airplane noise are present in the area but are not expected to affect the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Temporary construction noise will occur with each phase of the PWRP Improvements project work, including noise generated by construction vehicles, excavation, and construction equipment. The contractor will need to follow regulations set forth in Chapter 8.24, Franklin County Code, including controlling the level and timing of noise generated during construction. The completed project will involve noise from maintenance vehicles.

- 3) Proposed measures to reduce or control noise impacts, if any:

None proposed.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The east half of the City parcel is the existing PWRP that is operated by City Public Works staff. This area includes winter storage lagoons that have a total storage capacity of 163 MG

and existing, undersized pretreatment and headworks facilities. The south, north, northeast, and southeast parcels and the west half of the City parcel are largely undeveloped desert and shrub-steppe land. The Voss parcel is active cropland. The south parcel has an existing Bonneville Power Authority (BPA) overhead power line easement that spans it diagonally. This BPA easement crosses through the southwest portion of the City parcel and also bisects the southeast parcel.

Surrounding land uses are primarily agricultural with radially irrigated crop circles bordering many sides of all parcels in the project area. A feedlot for cattle exists on the northwest side of the northeast parcel. Cattle from the feedlot regularly graze on the north and northeast parcels. Some undeveloped land exists northwest of the existing PWRF.

The proposed project will convert existing shrub-steppe lands to either cropland or PWRF facility. Process water that is treated at the PWRF will be distributed to nearby leasehold farmers for land application on croplands near the PWRF.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The PWRF site has been used for treatment and distribution of process water from industrial food processor operations. The area around the PWRF consists of irrigated cropland. The Voss parcel will be temporarily used for application of fill dirt, but then returned to cropland.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

The proposal will result in improvements to the existing waste process facility, which will improve the quality and quantity of irrigation water being distributed to surrounding croplands.

- c. Describe any structures on the site.

Near the existing PWRF site, underground structures include process wastewater force mains and gravity mains, sewer mains, water lines, and power lines. Above-ground structures include telephone and electrical power poles and cables, and fences, among others. The PWRF site contains the IPS, treatment process facilities, and existing 5 MG, 8 MG, 35 MG, and 123 MG storage basins. No above-ground structures, except for the BPA easement overhead power lines, or underground structures exist on any of the land where future improvements will be constructed.

- d. Will any structures be demolished? If so, what?

No structures will be demolished. The existing 5 MG storage lagoon on the east half of the City parcel, south of the existing pretreatment and headworks buildings, will be filled.

- e. What is the current zoning classification of the site?

The project is within the County's Agriculture Production 20-Acre (AP-20) zoning district.

f. What is the current comprehensive plan designation of the site?

According to the *Franklin County Comprehensive Plan 2018-2038*, the PWRF site lies within the agricultural land use designation.

g. If applicable, what is the current shoreline master program designation of the site?

There are no shorelines of the state within the project area.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Fish and wildlife conservation areas (FWCAs) are present at the project site. Shrub-steppe habitat is abundant on the northeast parcel. On other parcels in the project vicinity, shrub-steppe habitat is present to a lesser extent.

i. Approximately how many people would reside or work in the completed project?

City Public Works staff currently work at the PWRF. With the proposed improvements, an increase in staff at the facility will be required to accommodate greater operations and maintenance needs.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project site is in the County AP-20 zoning classification and County agriculture land use designation per the *Franklin County Comprehensive Plan 2018-2038*, which do not outright permit the construction of wastewater treatment facilities.

The purpose of the project is to increase the capacity of the PWRF to store, treat, and distribute process water as irrigation water for land application. The PWRF will benefit agricultural production locally and will contribute water supply to irrigation for farming practices. A CUP is required by the County to permit the project in this zone.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

The project site involves undeveloped desert and shrub-steppe land. Soils in the project area are considered farmlands of statewide importance and prime farmland if irrigated. The

proposed project will support surrounding agricultural lands by storing, treating, and distributing process water as irrigation water for land application.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high-, middle-, or low-income housing.

None.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Phase 2 proposes a 6-foot-tall above grade electrical panel associated with a below-ground lift station (i.e. the condensate of whey (COW) water lift station), as well as 8-foot-tall chain link fencing with 3-strand barbed wire on top.

Phase 3 proposes structures, that are detailed in the SEPA and CUP application files.

Future expansion could involve the addition of a pump station building, likely concrete masonry unit (CMU) block material, with heights anticipated at approximately 30 feet tall. Future expansion also likely would involve installation of similar perimeter fencing as proposed in Phase 2.

- b. What views in the immediate vicinity would be altered or obstructed?

None. The proposed project includes grading and construction of new above-ground structures; however, surrounding land uses are primarily agricultural and no views would be altered or obstructed.

- d. Proposed measures to reduce or control aesthetic impacts, if any:

None proposed; however, aesthetic reduction strategies could be employed to comply with County or other permit processes.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Site lighting is proposed at several locations on the north parcel (e.g., the proposed COW water lift station, the effluent splitter box, the IPS splitter box, lagoon control structure, drain inlets, drain control structures, etc.). Lighting is still being designed but is anticipated to be low-level lighting used for emergencies or the occasional night work.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. Lighting is anticipated to be designed to minimize impacts to adjacent properties or result in safety hazards.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

Where it is feasible and useful, lighting can incorporate motion-activated lights.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Reclamation reported informal hunting (e.g., shooting practice) occurred on the north and northeast parcels. Otherwise, no recreational opportunities are known to be present in the immediate vicinity of the project site.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Not applicable.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

Two historic properties eligible for listing on the National Register of Historic Places (NRHP) exist on the southwest portion of the project site (CRC, 2022). Historic properties identified are the BPA B-F Nos. 1 and 2 Transmission Lines (Washington State Department of Archaeology and Historic Preservation (DAHP) Property Nos. 727922 and 665551). Both properties are eligible for listing on the NRHP under Criterion A, for association with construction of the BPA Master Grid and BPA System Expansion Period, respectively, and the role that the properties had in regional development of commercial, industry, and government programs.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

One archaeological site has been identified in the project area. The archaeological site is 45FR671, which is an early- to mid-twentieth century dirt road on parcel no. 124710054. This site is of low integrity and has not been recommended as eligible for listing on the NRHP (CRC, 2022).

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

CRC prepared a *Cultural Resources Assessment for the PWRF Improvements Project, Pasco, Franklin County, Washington* (July 2022), which indicates that the project location has a predominantly high risk of encountering as-yet unrecorded archaeological sites, with parts of the northwest quadrant of parcel no. 113090058 having a very high risk. However, because a thorough cultural resource survey has been conducted covering nearly the entire project area and no cultural resources were identified, CRC recommends a determination of “no historic properties affected” for the project.

Reclamation is presently consulting on this project as the lead federal agency with DAHP and area Indian Tribes, as required for compliance with Section 106 of the National Historic Preservation Act (NHPA), a component of SERP and NEPA.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

As part of CRC’s report, a project-specific Inadvertent Discovery Plan (IDP) was included, which is required to be onsite during all ground-disturbing activity associated with the project. If project activities result in the discovery of archaeological materials, project staff should halt work in the immediate area until technical staff at DAHP, along with representatives of identified area Tribes as outlined in the IDP, have been notified. No work should continue until further investigation and proper consultation has occurred. If human remains are inadvertently revealed, project staff should stop work, cover, and secure the remains against further disturbance, and contact law enforcement personnel consistent with the provisions set forth in Revised Code of Washington (RCW) 27.44.055 and RCW 68.60.055.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The site can be accessed from SR 395 by turning east onto East Foster Wells Road and turning north onto the marked PWRF access road.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Informal parking currently occurs for City staff and vehicles visiting the PWRF, primarily on a dirt access area near the IPS and existing PWRF lagoons on the west half of the City parcel. No formal parking is proposed for the project; however, informal parking is expected to continue.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

No additional vehicular trips are anticipated with the Phase 2 or future expansion improvements. The Phase 3 PRRC may generate additional vehicular trips, which are addressed in that project's SEPA and CUP applications.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Mobilization to the site for construction could temporarily affect traffic in the vicinity of the project site. Earthwork for Phase 2 could temporarily impact hauling of agricultural materials/goods on private roads; however, it is anticipated the City and contractor will coordinate timing of work and temporary impacts with adjacent property owners to minimize impacts.

- h. Proposed measures to reduce or control transportation impacts, if any:

None proposed.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

Not applicable.

16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Utilities proposed for the project include process piping and associated infrastructure improvements for delivery to and from storage lagoons and pretreatment facilities. New utilities to be constructed onsite include the following:

- Process wastewater pipe to pretreatment.
- COW water force main to IPS or lagoons.
- Treated wastewater (to lagoons or IPS) pipe.
- Gravity drain (to IPS) pipe.
- Treated wastewater force main (from IPS).
- Power lines.
- Water lines.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee _____ Maria Serra, PE

Position and Agency/Organization _____ CIP Manager -- City of Pasco (WA)

Date Submitted: _____ 10.19.22



FRANKLIN COUNTY

PLANNING AND BUILDING DEPARTMENT

CONDITIONAL USE PERMIT (CUP) APPLICATION PACKET

FREQUENTLY ASKED QUESTIONS:

What is a Conditional Use Permit?

A conditional use permit (also known as a special use permit) is a zoning exception which allows the property owner use of his or her land in a way not otherwise approved within the particular zoning district. The conditional use permit process is designed to allow flexibility within the zoning laws. A zoning ordinance cannot account for every situation, and exceptions such as the conditional use permit gives the County discretion to allow uses otherwise prohibited in the specific district for the benefit of the neighborhood or area.

Who needs to apply for a Conditional Use Permit?

Uses such as large scale accessory buildings, accessory buildings in front yard areas, churches, schools, daycare centers, cell towers, large animal operations, and other uses may require the approval of a CUP. Call the Planning and Building Department at 509-545-3521, visit our office at 502 W. Boeing Street, Pasco, WA 99301 or review Title 17 Zoning in the Franklin County Code to determine if you proposed use requires a CUP.

How do I get a Conditional Use Permit?

Planning and Building Department staff will assist you through the review process of a conditional use permit. The County Planning Commission reviews and will make recommendation regarding the permit request. The Board of County Commissioners will make the final decision. In this decision making process, all established standards, criteria, and policies regarding the proposed use within the zoning district will be reviewed. Conditions may be imposed that help maintain a balance with existing development and adjacent properties.

How do I apply for a Conditional Use Permit?

A pre-application meeting with the Planning and Building Department staff is encouraged for all Conditional Use Permit Applications. Applications are submitted to the Planning and Building Department. The following minimum application requirements shall be submitted:

1. Land Development Application;
2. Fees (see application checklist);
3. SEPA Review (see application checklist);
4. Written description explaining the present use of the land/structures, detailed description of the staff proposed use and request, description of any zoning violations on the property, and any other pertinent information deemed necessary; and
5. Site Plan.

What happens after I apply?

During the time prior to the public hearing, the Planning and Building Department staff will notify in writing (copy of public hearing notice) all the property owners of record within 500 feet of your property (if within an Urban Growth Boundary) or 1 mile of your property (if located outside an Urban Growth Boundary). Additionally, the staff will conduct a review of your request and will do the following:

1. Establish a hearing date for the request;
2. Send notification of the hearing to local newspapers;
3. Send notification of the request to applicable technical agencies for comments;
4. Send notification of the request to neighboring landowners (see above); and
5. Compile public and agency comments to help develop a staff Report for the hearing.

What happens at the public hearing?

An open record hearing (public hearing) is held to review your request. The applicant or representative is encouraged to be present to discuss and answer any questions the Planning Commission or public may have. Anyone who wants to testify for or against your request will be allowed to do so.

When do I find out if my permit was approved or denied?

At conclusion of this public hearing, the Planning Commission will make a recommendation to the County Commissioners to approve, approve with conditions, or deny the CUP request. This recommendation is processed through an appeal time period prior to appearing before the Board of County Commissioners for a final decision. For additional information regarding the timely filing of an appeal, closed record hearings, and Commissioner review and decision, please refer to Chapter 17.82 of the Franklin County Code or contact the Planning and Building Department for details and specifications.

*-- Keep this section for your records --
-- Return the following completed pages with your application --*



FRANKLIN COUNTY

CONDITIONAL USE PERMIT (CUP)

APPLICATION SUPPLEMENT

Submittal Checklist:

<input checked="" type="checkbox"/>	General Land Development Application
<input checked="" type="checkbox"/>	\$400.00 Conditional Use Permit Fee: Check made payable to the Franklin County Planning and Building Department.
<input checked="" type="checkbox"/>	\$150.00 SEPA Fee: Check made payable to the Franklin County Planning and Building Department.
<input checked="" type="checkbox"/>	SEPA Checklist: A completed State Environmental Policy Checklist shall be completed and submitted with this application.
<input checked="" type="checkbox"/>	<p>\$80.00 Variance Report Fee: Check made payable to the Franklin County Assessor's Office. An applicant <u>does not</u> need to contact the Assessor's Office to obtain this report. At the time of application, the Planning Division will request the report from the Assessor's Office. The report includes the Adjoining Property Owners' Names and Addresses (500 feet within an Urban Growth Area or one (1) mile outside an Urban Growth Boundary). As an alternative to the Assessor's Office, an applicant may also obtain this report from a licensed title company.</p> <p><i>Please note....the typical review period will not begin until this Variance Report is completed.</i></p>
<input checked="" type="checkbox"/>	<p>Site Plan: Provide a site plan on 8.5" x 11" or 11" x 17" paper, drawn neatly and to scale, that includes:</p> <ul style="list-style-type: none"> • North arrow, Legend stating the Owner/Applicant name, date the site plan was drawn, tax parcel number, and scale; • Exterior property lines and any adjacent public street or alley rights-of-way; • Existing and proposed buildings and other structures; • Existing and proposed retaining walls or fences (<i>indicate material, if the fencing provides visual screening, the height of the fence, and if there is barbed wire</i>); • Existing and proposed points of ingress and egress, drives and driveways and circulation pattern; • The location of existing and proposed parking areas with each parking space shown and surface type indicated and lighting noted; • Existing and proposed open spaces and landscape areas; • Water (Location of well or water systems within 100 feet of the subject property or within a 100 foot well control zone and the distance from any structures within the well control zone) and sewerage facilities (Location of proposed or existing drain field area, extension area, and tank area as well as replacement areas and distances to structures and property lines); • Storm water drainage; • Sidewalks and streetlights; • Fire protection devices, with sufficient water storage and flows; • Facilities or improvements to address compatibility with adjacent dissimilar land uses; • Location of structures on the adjoining lots, which may cause compatibility issues; • All major man-made and natural physical features such as railroads, canals, streams, creeks, drainage ditches, hills, depressions, steep slopes, lakes, shorelines, floodplains*, floodways,

	<p>the 100-year base flood elevations etc. on-site or adjacent to the site;</p> <ul style="list-style-type: none">• Proposed contours and grading as they affect lot layout, streets, and drainage ways; and• Location of proposed or existing drain field area, extension area, and tank area as well as replacement areas and distances to structures and property lines.
<input checked="" type="checkbox"/>	<p>Property information: Covenants, Conditions and Restrictions (CC&Rs) or deed restrictions pertaining to or affecting the property (if any).</p>
<input type="checkbox"/>	<p>Written approval from the Benton-Franklin Health District. The Health District is located at 7102 West Okanogan Place, Kennewick, WA – (509) 460-4205.</p>

CONDITIONAL USE PERMIT INFORMATION

ZONING:

Agricultural Production 20 zone (AP-20)

PROJECT NAME:

Process Water Reuse Facility (PWRF) Improvements Project

WHAT ARE YOU PROPOSING? (ex: Accessory Dwelling Unit, Bed and Breakfast, Commercial Agriculture, Church, Dairy, Accessory Building deviating from standards, Wireless Communication Facility, etc.)

Expansion of the existing City PWRF, including winter storage lagoons and pretreatment facilities (see attached Narrative).

LOT/PARCEL SIZE:

Refer to the attached Narrative.

SIZE OF THE AREA TO BE USED FOR THE PROPOSED USE OR BUILDING:

Refer to the attached Narrative.

PRESENT USE OF THE LAND AND STRUCTURES, IF ANY:

Most of the land in the project area is currently owned by the United States Bureau of Reclamation (Reclamation). It is primarily undeveloped desert and shrub-steppe. The eastern half of parcel no. 113090085, which is owned by the City of Pasco (City), is the existing PWRF site. The PWRF was constructed to provide centralized land application of food processing wastewater from various food processors in the area to nearby leasehold farmers. The PWRF stores process wastewater in on-site lagoons during the winter and pumps both new and stored process wastewater for irrigation in the spring, summer, and fall.

DETAILED DESCRIPTION OF THE PROPOSED USE / DEVELOPMENT PROPOSAL (ATTACH ADDITIONAL SHEETS IF NEEDED):

The PWRF site will be expanded as existing processors grow their operations and new processors come to the area. The City also will be adding pretreatment to the facility to improve water quality for land application. The City is currently seeking quitclaim from Reclamation for four pieces of land, including two adjacent 80-acre parcels to the north and south of the existing PWRF site, to accommodate future expansion. Refer to the attached SEPA Checklist and Conditional Use Permit Project Narrative for additional project description.

WILL THE PROJECT BE CONDUCTED ENTIRELY WITHIN A STRUCTURE? ☐ YES ☒ NO

A. IF NO, DESCRIBE THE OUTDOOR ACTIVITIES (E.G., OUTDOOR EATING, PLAYGROUND, PARK):

Parcel no. 113090058 will contain outdoor storage lagoons. Storage lagoons hold process water that is treated and distributed as irrigation water for land application.

B. WHAT IS THE APPROXIMATE SQUARE FOOTAGE, OR SEATING CAPACITY OF YOUR OUTDOOR USE AREA(S)?

Approximately 70 of the total 80 acres of the northern half of parcel no. 113090058 will be converted to winter storage lagoons.

C. WHAT TYPE OF NOISES WILL THE OUTDOOR USE GENERATE (E.G. MUSIC, MACHINERY, VEHICLES)?

Operation of treatment and renewable gas facilities machinery, vehicles, and pumps will generate minor noise in the area.

PROPOSED HOURS OF OPERATION/DAYS OF THE WEEK (INDICATE MONTHS, IF SEASONAL):

The facility will be utilized year round.

PROPOSED STRUCTURES AND USE (SIZE, HEIGHT, ETC.):

Proposed above-grade structures are the new pretreatment facility, headworks building, and renewable gas production building (as part of Phase 3). For Phase 2, structures include an above-grade electrical panel (6 feet) and a 6-foot-tall chain link fence. Future expansion facilities are detailed in the SEPA Checklist to the extent they are determined.

HOW WILL THE PROPOSED DEVELOPMENT BE COMPATIBLE WITH THE USES PERMITTED IN THE SURROUNDING ZONE(S)?

Surrounding zones are primarily AP-20. The proposed development is compatible with these land uses because the purpose of AP-20 zones is to maintain the agricultural economy of the County and preserve farm/crop lands. The PWRP promotes agriculture by reusing process wastewater from industrial agriculture operations in the City and providing treated process water as irrigation water to leasehold farmers in the area for land application.

DESCRIBE HOW THE SUBJECT PROPERTY IS PHYSICALLY SUITABLE FOR THE TYPE, DENSITY AND/OR INTENSITY OF THE USE BEING PROPOSED:

The subject property is physically suitable for this land use because it is a large, relatively flat, open, undeveloped parcel that can accommodate space needed for water storage. Furthermore, subject properties are adjacent to the existing PWRP site and expansion in the immediate area would be more economically feasible when compared to locating storage and/or pretreatment facilities offsite. The subject property is also near the land application service area, and delivery of irrigation water from the PWRP site to surrounding agricultural lands is practical and efficient.

PROPOSED MEASURES TO ENSURE COMPATIBILITY WITH PERMITTED USES IN THE SURROUNDING ZONE (EXAMPLE: FENCES, LANDSCAPE BUFFERS, BERMS, ETC):

Fencing will be installed around the PWRP for public safety and security purposes. The City plans to purchase parcel nos. 124710054, 124710063, and 113140039 for conversion to cropland to be leased to a local farmer. Irrigation water from PWRP will be distributed to leasehold farmers in the area for land application.

DESCRIBE ANY EXISTING ZONING ORDINANCE VIOLATION:

None known.

IRRIGATION SOURCE:

☒ NONE ☐ PRIVATE ☐ SCBID ☐ FCID

DOMESTIC WATER SUPPLY:

☐ ON-SITE WELL ☐ COMMUNITY WELL (Well ID # and location):

☒ OTHER (SPECIFY): City

SEWAGE DISPOSAL:

☐ ON-SITE SEPTIC ☒ OTHER (SPECIFY): On-site sewage storage disposed of by City.

LIST UTILITY PROVIDERS:

Power – Franklin PUD

Telephone –

Natural Gas – Cascade


Cable / Broadband –


Sanitary waste disposal - City

I, the undersigned, hereby authorize the filing of this application and certify under penalty of perjury that the information contained in this application is complete and correct to the best of my knowledge. Further, I hereby grant Franklin County staff or representatives to enter my property during the course of this review to inspect my property as needed.

☒ This authorizes the designated Applicant's representative (if applicable) to act on behalf of the applicant for the processing of this request.


Owner _____ Date 10.19.22


 Applicant/Representative


 Date

Print Name: Maria Serra, PE

Print Name: Alicia Pettibone



FRANKLIN COUNTY

PLANNING AND BUILDING DEPARTMENT

GENERAL LAND DEVELOPMENT APPLICATION

FOR STAFF USE ONLY:	FILE #:	S T A M P H E R E
	Total Fees: \$	Reviewed by:
	Receipt #:	Hearing Date:
	Date of Pre-App meeting:	
	Date deemed complete:	

CHECK ALL THAT APPLY AND ATTACH THE SUPPLEMENTAL FORM(S):	<input type="checkbox"/> Comprehensive Plan Amendment	<input type="checkbox"/> Boundary Line Adjustment
	<input checked="" type="checkbox"/> Conditional Use Permit	<input type="checkbox"/> Shoreline Substantial Development
	<input type="checkbox"/> Variance	<input type="checkbox"/> Shoreline Conditional Use Permit
	<input type="checkbox"/> Rezone	<input type="checkbox"/> Shoreline Variance
	<input type="checkbox"/> Non-Conforming Use Determination	<input type="checkbox"/> Shoreline Exemption
	<input type="checkbox"/> Zoning Interpretation / Administrative Decision	<input type="checkbox"/> Shoreline Non-Conforming
	<input type="checkbox"/> Short Plat	<input checked="" type="checkbox"/> SEPA Environmental Checklist
	<input type="checkbox"/> Subdivision (Long Plat)	<input type="checkbox"/> Appeal (<i>File # of the item appealed</i> _____)
	<input type="checkbox"/> Binding Site Plan	<input type="checkbox"/> Critical Areas Determination / Review / Reasonable Use Exemption
	<input type="checkbox"/> Lot Segregation Request	<input type="checkbox"/> Temporary Use Permit
	<input type="checkbox"/> Alteration / Vacation	<input type="checkbox"/> Home Occupation
	<input type="checkbox"/> Planned Unit Development	<input type="checkbox"/> H2A Farm Worker Housing (zoning review)
	<input type="checkbox"/> Other:	

<input checked="" type="checkbox"/> for contact person:	CONTACT INFORMATION
<input checked="" type="checkbox"/>	Property Owner Name: Maria Serra, P.E. (City of Pasco Public Works) Mailing Address: 525 North Third Avenue, Pasco, WA 99301 Phone: (509) 544-4125 Email: serram@pasco-wa.gov
<input checked="" type="checkbox"/>	Applicant / Agent / Contractor (if different) Company: RH2 Engineering, Inc. Name: Alicia Pettibone Address: 22722 29th Drive SE, STE 210, Bothell, WA 98021 Phone: (425) 466-6727 Email: apettibone@rh2.com
<input type="checkbox"/>	Surveyor / Engineer Company: RH2 Engineering, Inc. Name: Kyle Smith, P.E. Address: 114 Columbia Point Drive, Suite C, Richland, WA 99352 Phone: (509) 392-6490 Email: ksmith@rh2.com

BRIEF DESCRIPTION OF PROJECT OR REQUEST:

The City of Pasco (City) is expanding its Process Water Reuse Facility (PWRF). Expansion is split into three phases: Phase 1 extends City water for both drinking supplies and fire protection and realigns power/fiber to the existing PWRF facilities (in construction); Phase 2 provides additional winter storage through proposed lagoons on City-owned and Reclamation-owned parcels, and establishes a construction site for future pretreatment; and Phase 3 will construct the pretreatment improvements.

PROPERTY INFORMATION:

Parcel number(s) (9-digit tax number):

113090058, 113090085 PWRF improvements. 124710054, 124710063 earth movement and cropland conversion. 113090058, 113140039 future expansion.

Legal Description of Property:

Refer to the attached Narrative.

Site Address *(describe location if no address is assigned)*:


957 East Foster Wells Road
Pasco, Washington 99301

- All appropriate fees must accompany this application. Fees are non-refundable and subject to change. Please contact the Planning Department for current fee totals.
- This application, including attachments, must be completed in its entirety for all items applicable to your project.
- Supplemental information is generally required for land use approvals. Ensure that all required information is submitted along with this application form.
- If the property is owned by a corporation or LLC please attach documentation showing that the person signing as the "owner" has the authority to sign on behalf of the corporation or LLC. If there are multiple owners, provide an attachment in the same format and with the same declarations.

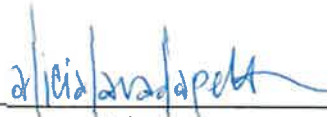
I, the undersigned, hereby authorize the filing of this application and certify under penalty of perjury that the information contained in this application is complete and correct to the best of my knowledge. Further, I hereby grant Franklin County staff or representatives to enter my property during the course of this review to inspect my property as needed.

I understand that any information submitted to the Franklin County Planning/Building Department is subject to public records disclosure laws for the State of Washington (RCW Chapter 42.17) and all other applicable laws that may require the release of the documents to the public.

☒ This authorizes the designated Applicant's representative (if applicable) to act on behalf of the applicant for the processing of this request.



Owner
10.19.22
Date



Applicant/Representative
10/19/22
Date

Print Name: Maria Serra, PE

Print Name: Alicia Pettibone



City of Pasco
Process Water Reuse Facility
Improvements Project
Franklin County
Conditional Use Permit
Project Narrative and Code Compliance
October 2022



Project Overview

The City of Pasco (City) proposes expansion and improvements to its existing Process Water Reuse Facility (PWRF), which receives and treats wastewater from local food processors prior to land application of treated irrigation water to leasehold farmers in the immediate vicinity. During the winter months, irrigation is prohibited and the supply of process water at the PWRF exceeds the irrigation demand; process wastewater is stored in lagoons as a result. Improvements are needed at the PWRF to meet operational, equipment, and hydraulic needs, and to add capacity for winter storage.

The primary facility improvements for the PWRF Improvements project are proposed on two parcels: 1) parcel no. 113090085 is currently owned by the City and includes the existing PWRF in the eastern half; and 2) parcel no. 113090058 borders the existing PWRF to the north and south. Grading from construction of the PWRF Improvements is anticipated to occur on parcel nos. 124710054 and 124710063, which are approximately 1 mile to the northeast. Parcel nos. 113090058 and 124710054 are owned by the U.S. Bureau of Reclamation (Reclamation) and will be conveyed through quitclaim to the City in association with this project. Parcel no. 124710063 is presently owned by Voss Farms Ltd Partnership (Voss) and used to grow crops and will be purchased by the City.

Improvements on the southern half of parcel no. 113090058 are anticipated to occur in the future. Similarly, a third Reclamation parcel, which would be four total plots of land purchased from Reclamation, is planned to be acquired by the City for the future expansion of the PWRF Improvements (parcel no. 113140039). **Figure 1** shows a project area map depicting the parcels involved in the project improvements.

Planned improvements at the PWRF include construction of treatment facilities (on the west half of parcel no. 113090085), excavation of winter storage basins (on the north half of parcel no. 113090058) and conversion of land to cropland for eventual land application of PWRF treated irrigation water (on parcel nos. 124710054 and 124710063). Future expansion also may include additional winter storage basins and pump station facilities (on the south half of parcel no. 113090058) and conversion to cropland of parcel no. 113140039.

The project is in the Franklin County (County) Agricultural Production 20-Acre (AP-20) zoning classification which does not permit the proposed land use outright. The City is submitting this discussion of existing and proposed land uses to demonstrate compliance with the County's zoning code with regards to conditional uses in the AP-20 zoning classification. This attachment

is intended to be reviewed by the County with the submitted Conditional Use Permit (CUP) application.

Existing Site Use/Conditions

Present use of land on the east side of parcel no. 113090085 is for the existing PWRF, which is owned and operated by the City. This includes 5-, 8-, 35-, and 123-million-gallon (MG) winter storage lagoons and the current pretreatment and headworks buildings. Winter storage capacity and pretreatment equipment are undersized and unable to meet increasing process water demand. Approximately five City Public Works staff work at the PWRF. The perimeter of the existing PWRF has a chain-link fence that excludes the public for safety and security purposes.

The west side of parcel no. 113090085 and the entirety of parcel nos. 113090058 and 124710054 are undeveloped desert and shrub-steppe land. Parcel no. 124710063 is cropland. Parcel no. 113140039 also is undeveloped shrub-steppe. The undeveloped parcels contain a plant community dominated by non-native cheat grass (*Bromus tectorum*) and other grasses and forbs with mosaics of rabbit-brush and sagebrush. All the parcels are generally flat with some gently rolling hills that span from southwest to northeast across the landscape. This undeveloped land provides habitat for wildlife, especially shrub-steppe dependent species.

An existing overhead power line easement, owned and maintained by the Bonneville Power Administration, crosses the south side of parcel no. 113090058 the southwest portion of parcel no. 113090085, and bisects the future expansion parcel no. 113140039.

Lot/Parcel Sizes and Planned Improvements

Primary PWRF improvements involve the following parcels:

- Parcel no. 113090085 – City owned, 80 acres in size, and contains the existing PWRF in the eastern half (40 acres). Improvements primarily will occur in the western half (40 acres) and include construction of the Pasco Resource Recovery Center (PRRC), which will improve and replace the existing pretreatment facilities for the PWRF. Referred to as Phase 3.
- Parcel no. 113090058 – Reclamation owned and to be purchased by the City, 160 acres in size, and the north and south 80 acres are bisected by City PWRF parcel no. 113090085. Improvements primarily will occur on the northern half (80 acres) and include construction of winter storage basins (approximately 329 MG capacity in 3 lagoons), utility piping, an underground pump station and above grade electrical/controls panel, fencing, and access road. Referred to as Phase 2.
- Improvements involve 120 acres of land (west half of parcel no. 113090085 and north half of parcel no. 113090058) where new PWRF improvements are proposed.

Earth movement from primary PWRF improvements involve the following parcels:

- Parcel no. 113090085 – City owned. The western half will be graded for the PRRC.
- Parcel no. 124710054 – Reclamation owned and to be purchased by the City; 80 acres in size. Existing sagebrush-steppe lands will be graded, receive earth from winter storage lagoon construction in Phase 2, converted to cropland, leased to a farmer, and ultimately receive PWRF processed wastewater for land-applied irrigation of cropland.
- Parcel no. 12410063 – Owned by Voss and planned to be purchased by the City; 80 acres in size. Existing cropland will be graded, receive earth from winter storage lagoon construction in Phase 2, returned to cropland, leased to a farmer, and ultimately receive PWRF-processed wastewater for land-applied irrigation of cropland.
- Earth movement for all 3 parcels involves 200 acres.

Future expansion is anticipated to occur on the following parcels:

- Parcel no. 113090058 – Owned by Reclamation and planned to be transferred to the City through quitclaim, 160 acres in size, and the north and south 80 acres are bisected by City PWRF parcel no. 113090085. Future expansion is anticipated to occur on the south 80 acres, including potentially constructing additional winter storage basins, a pump station, process utility piping, fencing, etc.
- Parcel no. 113140039 – Owned by Reclamation and planned to be transferred to the City through quitclaim; 160 acres in size. Earth movement from the southern half of parcel no. 113090058 likely would occur on this parcel, followed by conversion to cropland, leasing to a farmer, and irrigation of cropland with land-applied PWRF water.
- Future expansion on both parcels involves 240 acres of land.

Legal Description of Parcels

Taken from County Property Map Viewer.

Parcel no. 113090085: S2NW4 4-9-30

Parcel no. 113090058: LOTS 3 & 4 & N2SW4 4-9-30

Parcel no. 124710054: W2NW4 34-10-30

Parcel no. 124710063: E2NW4 34-10-30

Parcel no. 113140039: NE4 9-9-30

Discussion of Proposed Site Use

Figure 2 shows a conceptual proposed site plan for the immediate PWRF Improvements (Phases 2 and 3). A complete description of each currently planned PWRF Improvements project phase follows.

Phase 2

Phase 2 provides approximately 329 MG of additional winter storage to the PWRF through proposed lagoons on the north half of parcel no. 113090058. Phase 2 also involves the installation of various sizes (ranging from 6- to 42-inch diameter) and types (e.g., high density polyethylene (HDPE), polyvinyl chloride (PVC), etc.) of utilities, including drain lines, force mains, power, water, and sewer lines, etc., primarily intended to connect the new winter storage ponds to the existing PWRF facility and the proposed PRRC. A small (approximately 200 square feet (sf)), prepackaged, below grade lift station with submersible pump and an above-grade electrical panel also will be constructed for washdown of storage ponds (i.e. the condensate of whey water lift station). It is anticipated that earth from the winter storage lagoon construction could be used to establish grades for the PRRC as part of Phase 3. Earth movement is planned to occur on parcel nos. 113090085 (to fill the existing 5 MG pond), 124710054, and 124710063 as part of the Phase 2 construction work.

Phase 3

Phase 3 will construct the PRRC, which includes pretreatment improvements to effectively replace and improve the current treatment functions of the active PWRF. Major components include a new headworks for primary screening and grit removal and two anaerobic digesters that will significantly reduce the biological oxygen demand in the process wastewater. A proposed Rotating Algae Biofilm (RAB) system will help remove nitrogen. This pretreatment will generate significant biogas that will be captured and used as a renewable energy source. Renewable natural gas will be pumped back to the energy grid through a gas main extending from the pretreatment site to an off-site interconnected facility (connected ultimately to facilities owned and operated by Cascade Natural Gas). These improvements are being designed, constructed, and operated by Burnham SEV Pasco, LLC, (BurnhamSEV); consequently, this phase is being permitted separately from other PWRF improvements. BurnhamSEV and the City have entered a long-term contract for this phase of the project. The PRRC SEPA and CUP application files, submitted to the County in early August 2022, detail these improvements further.

Future Expansion

There is no schedule or concrete proposal for the future expansion of the PWRF because it is dependent on processor demands and other operational constraints.

As currently conceptualized, future phases of the project could include expansion of the PWRF to the south half of parcel no. 113090058, including construction of additional winter storage basins, pump station, and utilities. This expansion could add an additional approximately 248 MG of winter storage capacity to the PWRF. **Figure 3** shows the conceptual proposed site plan that includes the southern half of this parcel.

The 160-acre parcel no. 113140039 to the southeast could be graded and converted to cropland for use in land applying PWRF process wastewater. This earthwork and land conversion is anticipated to occur in a future expansion of the PWRF.

Zoned Use Consistency

Proposed PWRF cropland land uses are consistent with Franklin County Code (FCC) 17.10.020(B), which states that land used for agriculture is permitted in the AP-20 zone provided it meets all subsection requirements. Conversion of undeveloped lands to cropland and land application of process water on parcel nos. 124710054 and 124710063, and eventually 113140039, is not specifically anticipated to require a CUP because it supports agricultural land uses in the AP-20 zone.

Proposed land use on parcel nos. 113090085 and 113090058, as part of Phase 2 and the future expansion, is consistent with FCC 17.10.040(E) and 17.10.040(M), which state that pumping plants, transmission lines, and processing (industrial or manufacturing plants) of agricultural products that are not produced or grown on site are uses that may be permitted in the AP-20 zone with a CUP. The PWRF facility is a pretreatment, storage, and distribution facility that processes agricultural products and contains transmission lines that convey treated and untreated process water. Other utilities associated with the PWRF are power, natural gas, and potable water transmission lines. All proposed land uses are associated with, and a benefit to, the surrounding permitted agricultural land uses described in FCC 17.10.020(B).

Description of Zoning Violations on the Property

No known zoning violations exist on any of the parcels in the proposed project area.



PROCESS WATER REUSE FACILITY IMPROVEMENTS BIOLOGICAL SURVEY REPORT

Prepared for City of Pasco

August 2022

PSC 21.0236



Prepared by:
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City of Pasco

Process Water Reuse Facility Improvements

Biological Survey Report

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Appendices

Appendix A – Background Environmental Data
Appendix B – Field Maps and Data
Appendix C – Site Photographs
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City of Pasco

Process Water Reuse Facility Improvements

Biological Survey Report

Project Overview

The City of Pasco (City) owns and operates an industrial wastewater treatment facility, the Process Water Reuse Facility (PWRF), located just north of the City limits and east of State Route 395 in Franklin County (County). The PWRF was constructed in 1995 to manage process wastewater from various food processors in the region. Process water is stored and treated, then land applied as irrigation water to nearby leasehold farmers. The PWRF stores process wastewater in on-site lagoons during the winter and pumps both new and stored process wastewater for irrigation in the spring, summer, and fall. The City is proposing expansion of and improvements to the PWRF, which are necessitated by the expansion of existing processors and the addition of new processors to the area, including Darigold, Inc. The City also will be adding treatment to the facility to improve water quality for land application.

The PWRF Improvements project is proposed on three parcels: 1) parcel no. 113090085 is currently owned by the City and includes the existing PWRF in the eastern half; 2) parcel no. 113090058 borders the existing PWRF to the north and south; and 3) parcel no. 124710054 is approximately 1 mile to the northeast. Parcel nos. 113090058 and 124710054 are owned by the United States Bureau of Reclamation (Reclamation) and will be conveyed through quitclaim to the City in association with this project. In addition, a third Reclamation parcel (which would be four total plots of land) may be purchased by the City for the PWRF Improvements (parcel no. 113140039). At present, the City is focusing PWRF expansion to target the aforementioned Reclamation parcels (no. 113090058 and 124710054). **Figure 1** shows the project area and subject parcels.

PWRF Improvements are planned to occur in the following phases:

- Phase 1 extends City water for both drinking supplies and fire protection and realigns power/fiber to the existing PWRF facilities. Construction is occurring in summer 2022.
- Phase 2 provides additional winter storage through proposed lagoons on the north half of parcel no. 113090058. It is anticipated that earth from the winter storage lagoon construction will be used to establish grades for the treatment facility improvements as part of Phase 3. Earth movement also may occur on the southern half of parcel no. 113090058 and/or parcel no. 124710054 as part of the Phase 2 construction work. Construction is scheduled for winter 2022/2023.
- Phase 3 will construct the PWRF treatment improvements, primarily on the west half of parcel no. 113090085. Treatment improvements will be designed and constructed and the facility will be operated by Burnham SEV Pasco, LLC. Construction is scheduled for winter 2022/2023.

Figure 1. Project Area Map



- Future expansion of the PWRF could include construction of additional winter storage lagoons on the south half of parcel no. 113090058. There is currently no schedule for the future expansion as it is dependent on processor demands, as well as other operational constraints. It is anticipated that parcel no. 124710054 will be graded and converted to cropland and leased to a farmer for land-application of PWRF process wastewater. Under Phases 2, 3, and future expansion, earthwork activities could involve grading on this parcel. Future expansion also may involve purchase of parcel no. 113140039 from Reclamation and likely conversion to cropland like the northeast parcel.

Figure 2 shows the proposed conceptual PWRF expansion on parcel nos. 113090058 and 113090085. **Figure 3** shows the proposed conceptual Phase 2 site plan. Design is currently in progress for Phases 2 and 3, with design plans anticipated over the coming months.

The City's acquisition of the Reclamation-owned parcels requires Reclamation to fulfill its compliance with the National Environmental Policy Act (NEPA). Among several state and federal statutes, NEPA compliance involves consultations with the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) to satisfy Section 7 of the Endangered Species Act (ESA), and consultations with the Washington State Department of Archaeology and Historic Preservation and area Indian Tribes to satisfy Section 106 of the National Historic Preservation Act (Section 106). The City has received funding for this project from the Washington State Department of Ecology (Ecology) under the Clean Water State Revolving Fund (Agreement WQC-2021-Pasco-00144) and will need to comply with the State Environmental Review Process (SERP) for this project. Additionally, the project has benefitted from pre-construction funding from the Public Works Board (Contract PR18-96104-065). Acceptance of Public Works Board monies requires compliance with several state and federal statutes as well.

The City retained RH2 Engineering, Inc., (RH2), along with RH2's subconsultant Cultural Resource Consultants, to complete environmental and cultural reviews for the project. The objective of this report is to relay the findings of biological surveys conducted by RH2 for the project and provide data that will guide environmental permitting associated with the project. This report has been prepared by RH2 and is intended to assist in facilitation of NEPA approvals through Reclamation, SERP compliance, and coordination of mitigation measures with Washington Department of Fish and Wildlife (WDFW) for compliance with the County's Critical Areas Ordinance.

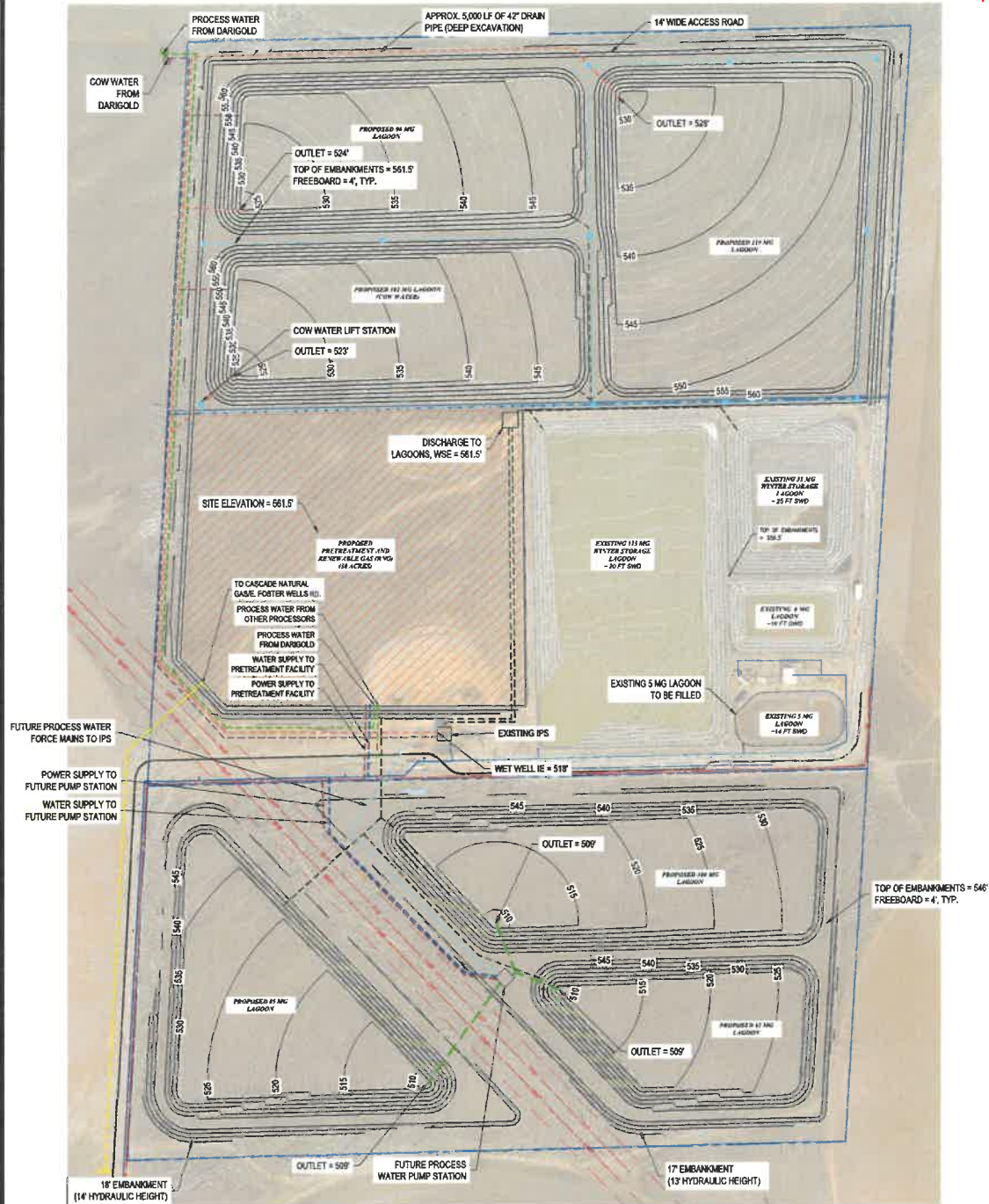
Methods

Prior to field investigations, RH2 reviewed the following background data:

- Existing and historic aerial photography (Google Earth).
- LiDAR mapping (Washington State Department of Natural Resources (DNR)).
- Fish and wildlife occurrence data (DNR, WDFW, USFWS, and NMFS).
- Stream and wetland mapping (DNR, Ecology, WDFW, and USFWS).

Figure 2. PWRF Improvements Conceptual Proposed Site Plan

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PROPOSED SITE PLAN
N

LAGOON STORAGE (PHASE 2)

Lagoon	Winter Storage (MG)
PROPOSED 96 MG LAGOON	96
PROPOSED 102 MG LAGOON (COW WATER)	102
PROPOSED 119 MG LAGOON	119
Total	317

LAGOON STORAGE (FUTURE)

Lagoon	Winter Storage (MG)
PROPOSED 85 MG LAGOON	85
PROPOSED 100 MG LAGOON	100
PROPOSED 63 MG LAGOON	63
Total	248

EARTHWORK (PHASE 2)

Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	900,000	1,040,600	140,600 FILL

EARTHWORK (FUTURE)

Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	997,400	209,600	787,800 CUT

LEGEND

	PROCESS WASTEWATER
	COW WATER FORCE MAIN
	TREATED WASTEWATER (TO LAGOONS/IPS)
	GRAVITY DRAINS (TO IPS)
	TREATED WASTEWATER FORCE MAIN (FROM LAGOONS)
	POWER LINE
	NATURAL GAS LINE
	WATER LINE

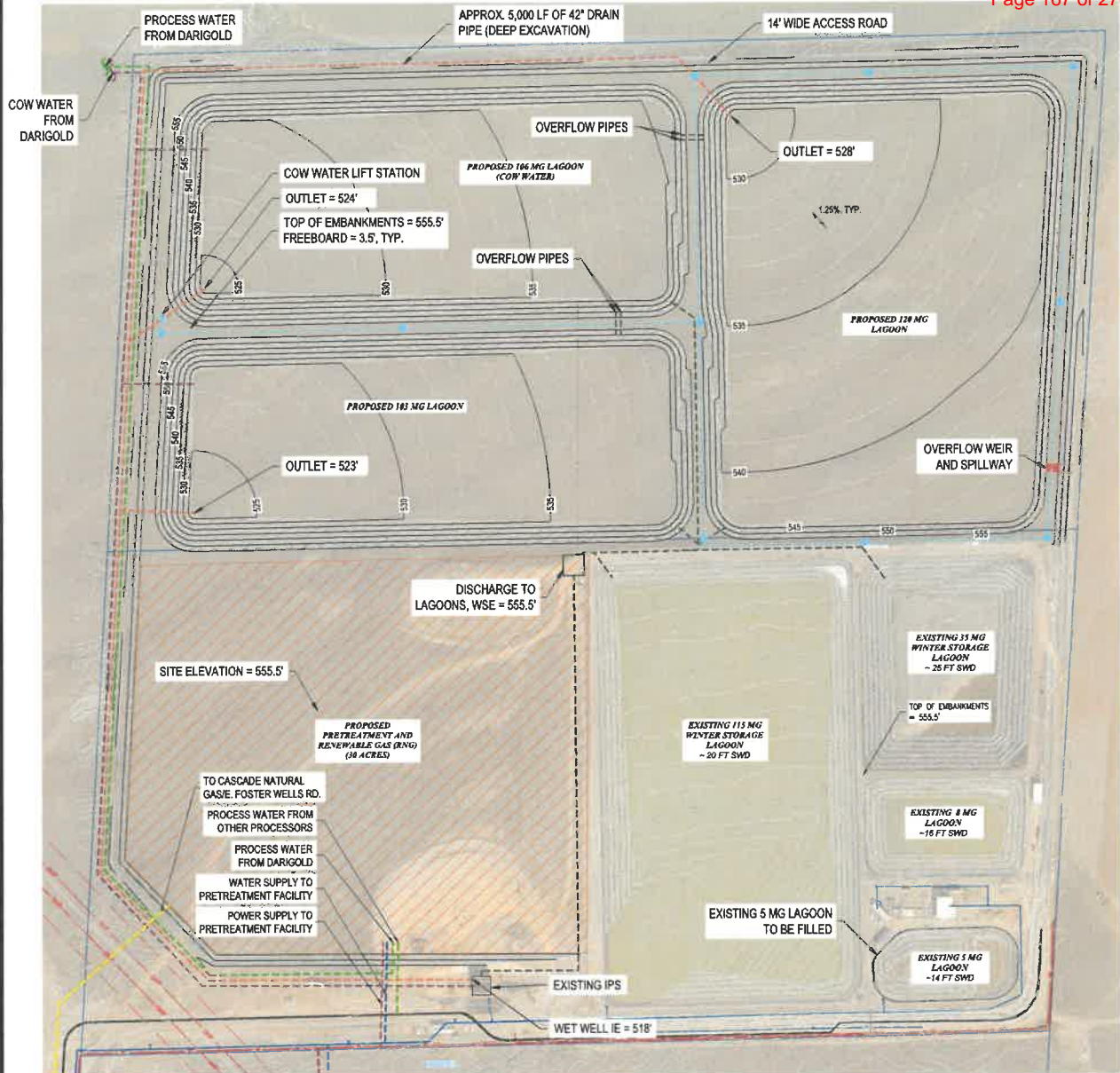
CONCEPTUAL SITE LAYOUT

PASCO PROCESS WATER REUSE FACILITY



Figure 3. PWRF Improvements Conceptual Phase 2 Proposed Site Plan

January 31, 2023 BoCC Meeting
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CONCEPTUAL SITE PLAN - PHASE 2

EARTHWORK

Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	1,443,970	533,590	910,380 CUT

LAGOON STORAGE

Lagoon	Winter Storage (MG)
PROPOSED 186 MG LAGOON	306
PROPOSED 128 MG LAGOON	263
PROPOSED 125 MG LAGOON	126
Total	329

LEGEND

---	PROCESS WASTEWATER
---	COW WATER FORCE MAIN
---	TREATED WASTEWATER (TO LAGOONS/IPS)
---	GRAVITY DRAINS (TO IPS)
---	TREATED WASTEWATER FORCE MAIN (FROM LAGOONS)
---	POWER LINE
---	NATURAL GAS LINE
---	WATER LINE

- Soils data (Natural Resources Conservation Service (NRCS) Soil Conservation Service).

Relevant background data and maps are included in **Appendix A**.

Ahead of biological surveys, the parcels were separated into baselines and transects. This methodology follows RH2's typical approach for biological surveys of parcels over 5 acres, as well as the recommendations of WDFW for land surveys of solar projects in the region (Mr. Mike Ritter, WDFW, personal communications). For each of the subject parcels, a baseline was established with an average length of 1,350 linear feet (lf); baselines were established along the western property boundary for parcel nos. 113090058 and 113090085, and along the northern property boundary for parcel no. 124710054. The subject parcels were divided into 5 transects, spaced at approximately 250 feet on center. Transects for parcel nos. 113090058 and 113090085 were aligned in the west-east direction, and transects for parcel no. 124710054 were aligned in the north-south direction due to the orientation of the parcel.

Initial biological surveys and establishment of transects occurred by RH2's Richland Office project staff in late May and early June 2022. Transects were established on parcel nos. 113090058 and 124710054, and the west half of parcel no. 113090085.

On May 27, 2022, Ms. Alicia Pettibone and Ms. Jenny Sandifer of RH2 performed initial transect surveys of the northern half of parcel no. 113090058 and parcel no. 124710054. Ms. Pettibone, Ms. Sandifer, and Mr. Noah Bloxton of RH2 then performed biological surveys of all parcels June 8 through 10, 2022. Parcels surveyed were assessed for vegetation communities and structure and any indicators of wildlife presence.

Surveys were generally conducted between 7:00 am and 5:00 pm. Surveyors were spaced approximately 50 feet from each other and walked transects in parallel lines. Observations of individual plant species, vegetation community assemblage, and plant community structure were recorded. Surveyors recorded any wildlife sightings or indications of wildlife use (e.g., scat, tracks, burrows, pellets, nests, etc.) encountered on or within proximity of the transects. Field notebooks and a field map were used for recording of observations. **Appendix B** contains RH2's field maps and data, including a summary of ground burrows encountered.

Existing Conditions

Examination of existing and historical aerial imagery shows that the City PWRF was partially constructed prior to 1996. By 2003, the 115 million gallon (MG) storage lagoon had been constructed on the east half of the City parcel. Clearing and grading for the additional 35 MG and 8 MG winter storage lagoons began in 2013, and construction was complete by 2015. By 2015, the headworks/screens building, clarification/sedimentation basin, and screw press facilities also had been constructed. Aerial imagery from 2016 shows the addition of sand traps at the site. Disposal of excavated material and other various facility-related uses on the west half of the City parcel are evident from 2013 onward. The Irrigation Pump Station (IPS) was constructed on the west half of the City parcel prior to April 2021.

Surrounding land uses have been primarily agricultural with radially irrigated crop circles densely clustered around the existing PWRF and currently Reclamation-owned parcels. Parcel

nos. 113090058, 124710054, and 113140039 to the southeast of the PWRF are undeveloped shrub-steppe habitat, existing in that way before the PWRF construction. Prior to construction of the PWRF, the larger PWRF expansion site likely existed as part of a relatively intact, continuous swath of shrub-steppe habitat. LiDAR imagery shows the site as a generally flat area with some narrow hills that span from southwest to northeast on all parcels.

DNR's Forest Practices Activity Mapping Tool, the USFWS National Wetland Inventory, and Priority Habitat and Species (PHS) maps do not show any streams or wetlands in or around the immediate project area. PHS maps indicate that shrub-steppe habitat features are present to varying extents on all parcels in the project vicinity.

Drainage canals and ponds associated with irrigation for agricultural practices in the area are approximately 0.85 miles and 1.5 miles from the project area, respectively. The Columbia River and the Snake River are both approximately 5 miles from the existing PWRF at the nearest point. The confluence of the Columbia and Snake Rivers is approximately 6.5 miles southeast of the existing PWRF. PWRF irrigation water undergoes treatment and land application processes that generally improve the quality of water draining through groundwater to surface waters in the region.

The NRCS Web Soil Survey shows the project site as located within the following soil units: Quincy loamy fine sand, 0 to 15 percent slopes; Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes; and Royal fine sandy loam, 0 to 2 percent slopes.

State Species of Concern

Species of concern at the state level were identified from a review of PHS data and from personal communications with WDFW. Several species identified may occur within the project vicinity or have suitable habitat on or near the project area. **Table 1** summarizes state species of concern that may be present in the project vicinity.

Table 1. State Species of Concern in the Project Area

Regulatory Jurisdiction	State Status	Common Name	Scientific Name	Potential Suitable Habitat in Project Area
WDFW	Endangered	Greater sage-grouse ¹	<i>Centrocercus urophasianus</i>	No, species does not occur in the area
	Candidate	Burrowing owl	<i>Athene cunicularia</i>	Yes, PHS mapped near project area
	Candidate	Washington ground squirrel	<i>Uroditellus washingtoni</i>	Yes, PHS mapped near project area
	Candidate	Sagebrush sparrow	<i>Artemisiospiza nevadensis</i>	Yes, shrub-steppe habitat
	Candidate	Sage thrasher	<i>Oreoscoptes montanus</i>	Yes, shrub-steppe habitat
	SGCN ²	Monarch butterfly	<i>Danaus plexippus</i>	No
	-	Long-billed curlew	<i>Numenius americanus</i>	Yes

¹Presence of suitable habitat for these species is not available in the project area. As such, this survey does not address these species. No effects are anticipated for these species, their foraging base, or their habitats.

²Species are identified as Species of Greatest Conservation Need (SGCN) under the State Wildlife Action Plan.

Burrowing owl, greater sage-grouse (*Centrocercus urophasianus*), Washington ground squirrel (*Uroditellus washingtoni*), and monarch butterfly (*Danaus plexippus*) are all mapped as occurring in the region. Burrowing owl (*Athene cunicularia*), a state candidate species, is known to utilize the vacant space between center pivot irrigated crop circles near the project area (Mr. Jason Fidora, WDFW, personal communications). Greater sage-grouse, a state endangered species, was confirmed to be absent within the survey area (Mr. Mike Ritter, WDFW, personal communications). Monarch butterfly are dependent upon milkweed (*Asclepias spp.*), which grows in moist soils and may occur along the edges of irrigated crop fields in the area (Mr. Mike Ritter, WDFW, personal communications). Other species identified by WDFW as important for survey were long-billed curlew (*Numenius americanus*) and shrub-steppe dependent state candidate species, including sagebrush sparrow (*Artemisiospiza nevadensis*) and sage thrasher (*Oreoscoptes montanus*).

ESA Listed Species and Habitats

Several species federally listed under the ESA occur within Franklin County; however, no critical habitat exists for any of the listed species within the PWRP Improvements project area. Furthermore, due to life history and habitat requirements, no suitable habitat is anticipated to be present within the project area for the species that are ESA listed by either USFWS or NMFS. **Table 2** summarizes listed species potentially present in the region surrounding the PWRP.

Table 2. Federally Listed Endangered and Threatened Species in Franklin County

Regulatory Jurisdiction	Federal Status	Common Name	Scientific Name	Designated Critical Habitat in Franklin County
USFWS	Endangered	Gray wolf*	<i>Canis lupus</i>	No
	Threatened	Bull trout*	<i>Salvelinus confluentus</i>	Yes, Columbia and Snake Rivers
	Threatened	Yellow-billed cuckoo*	<i>Coccyzus americanus</i>	No
	Threatened	White bluffs bladderpod*	<i>Physaria douglasii ssp. tuplashensis</i>	Yes, Columbia River shoreline near Hanford National Monument
	Candidate	Monarch butterfly	<i>Danaus plexippus</i>	No
NMFS	Endangered	Spring-run Chinook*	<i>Oncorhynchus tshawytscha</i>	Yes, Upper Columbia River ESU
	Endangered	Sockeye*	<i>O. nerka</i>	Yes, Snake River ESU
	Threatened	Fall-run Chinook*	<i>O. tshawytscha</i>	Yes, Snake River ESU
	Threatened	Steelhead*	<i>O. mykiss</i>	Yes, Upper Columbia River ESU
	Threatened	Steelhead*	<i>O. mykiss</i>	Yes, Middle Columbia River ESU
	Threatened	Steelhead*	<i>O. mykiss</i>	Yes, Snake River ESU
*Presence of suitable habitat for these species is not available in the project area. As such, this survey does not address these species. No effects are anticipated for these species, their foraging base, or their habitats. ESU = Evolutionarily significant unit				

ESA-listed species in the County with a summary and brief discussion of habitat suitability, as it pertains to the PWRF project site, are as follows.

Gray wolf, an endangered species under the ESA, occurs in Franklin County. Gray wolves are habitat generalists with a large historical range in North America. While gray wolves can live in a wide variety of environments, suitable habitat is generally considered to be forested terrain with sufficient ungulate prey populations and minimal human disturbance. The PWRF site is an arid desert with significant human development and agricultural activity in proximity. No suitable habitat for gray wolf is present in the PWRF project area, and the project is anticipated to have no effect on this species.

Yellow-billed cuckoo, a threatened species under the ESA, occurs in Franklin County. Yellow-billed cuckoo require wooded habitat with dense cover in proximity to water. In the western United States, yellow-billed cuckoo tends to nest in willows (*Salix* spp.) in riparian corridors along streams and rivers and frequent nearby cottonwood (*Populus* spp.) stands for foraging. The PWRF site is an arid desert site comprised of shrub-steppe shrubs, grasses, and

forbs; it is not in proximity to a natural waterbody. No suitable habitat for yellow-billed cuckoo exists in the project area; therefore, the project will have no effect on this species.

White bluffs bladderpod, a plant species that only occurs along the east side of the Columbia River near the Hanford National Monument, is ESA listed as threatened. This species requires weathered alkaline paleosols and mixed soils overlying the Ringold Formation, which do not occur in the project area. The project will have no effect on this species.

Monarch butterfly is a candidate species and consultation with USFWS under Section 7 of the ESA is not required; however, conservation of the species is encouraged. This species is dependent upon plants in the milkweed family (*Asclepiadaceae*) for egg laying and as a food source for larvae. No suitable habitat for monarch butterfly is present in the PWRF project area; therefore, the project will have no effect on this species.

Other federally listed species include NMFS-jurisdiction salmonids and bull trout, all of which occur in the Columbia or Snake River, which are both approximately 5 miles from the project area. The proposed project will not have any adverse impacts on the Columbia River or Snake River; therefore, no effects are anticipated on listed fish species.

Results

Parcel no. 113090058 consists of a divided parcel that abuts parcel no. 113090085 on its north and south sides; it will be referred to herein as the north parcel and south parcel, respectively. Parcel no. 124710054, approximately 1 mile northeast of the PWRF, will be referred to herein as the northeast parcel. The 40-acre west half of parcel no. 113090085 will be referred to as the City parcel. Refer to **Appendix B** (Field Maps and Data) and **Appendix C** (Site Photographs) for reference of summarized observations and burrows in this section.

South Parcel

General Conditions

The 80-acre south parcel is a partially disturbed, relatively flat area with some gentle rolling topography. Plant diversity is generally high on the parcel, with many different non-native and native forbs and grasses observed. Some small patches of sagebrush are found throughout the parcel. Vegetation is overgrown, especially near the PWRF access driveway on the west side of the parcel where cereal rye (*Secale cereale*) grows dense and tall. The Bonneville Power Administration (BPA) overhead power line easement, which predates the PWRF, and its associated earthen access roadway bisects the parcel from southeast to northwest.

Vegetation

The plant community on the south parcel generally consists of non-native grasses and forbs with some relatively intact patches of native forbs and sagebrush/rabbitbrush shrubs.

Near the PWRF gravel access driveway on the west side of the south parcel, the vegetation community consists of a dense stand of cereal rye. In open areas to the east, cheatgrass

(*Bromus tectorum*) is dominant; however, a diverse community of forbs is present throughout the parcel. Forbs observed included yarrow (*Achillea millefolium*), yellow salsify (*Tragopogon dubius*), desert parsley (*Lomatium sp.*), tumble mustard (*Sisymbrium altissimum*), fiddleneck (*Amsinckia sp.*), prickly lettuce (*Lactuca serriola*), and Russian thistle (*Salsola tragus*). Needle-and-thread grass (*Hesperostipa comata*) and bulbous bluegrass (*Poa bulbosa*) are also common amongst dense stands of cheatgrass. Several small areas dominated by basin big sagebrush (*Artemisia tridentata ssp. tridentata*) are present on the parcel, some of which are connected to patches of common rabbitbrush (*Ericameria nauseosa*). Near the northeast corner of the parcel, an eastern cottonwood (*Populus deltoides*) tree and snag provides notable bird habitat. Cryptobiotic soil crust was observed on some barren, open areas throughout the parcel. Cryptobiotic soil crusts help prevent erosion, promote retention of soil moisture, and provide several other benefits in arid shrub-steppe environments. **Table 3** summarizes the dominant vegetation on the south parcel.

Table 3. South Parcel Dominant Plant Species

Parcel No.	Dominant Grass	Dominant Forb	Dominant Shrub
113090058 (South)	Cheatgrass, cereal rye	Fiddleneck, tumble mustard, yarrow	Basin big sagebrush, common rabbitbrush

Wildlife

A total of eight burrows were recorded throughout the south parcel. All except for burrow no. 8 were observed within 250 feet of the existing overhead power lines and easement access road. Burrows were generally associated with areas of gently rolling hills near patches of basin big sagebrush. Near burrow no. 2, loose tufts of fur and small white scat was observed near the sand mound opening in front of the burrow. Near burrow no. 6, a pellet containing small rodent remains, including an intact skull, jaw, and bones, was recorded. Of the burrows recorded, it is anticipated that four were created by coyotes (*Canis latrans*), four were created by American badger (*Taxidea taxus*), and two are suitable habitat for burrowing owl. **Table 4** summarizes the burrow observations on the south parcel.

Table 4. South Parcel Burrow Observations

Parcel No.	Number of Burrows	Primary Species Association	Suitable Habitat for Burrowing Owl	Other Notes
113090058 (South)	8	Coyote, American badger	2 burrows	Generally near overhead power lines and sagebrush

Other wildlife observed throughout the south parcel includes several bird species. In agricultural fields and along dirt roadways adjacent to the survey area several red-winged blackbirds (*Agelaius phoeniceus*) and western meadowlark (*Sturnella neglecta*) were observed. Barn swallows (*Hirundo rustica*) and other unidentified bird species were flying overhead. Near the northeast corner of the parcel, in the eastern cottonwood, western kingbird (*Tyrannus verticalis*), lark sparrow (*Chondestes grammacus*), mourning dove (*Zenaida macroura*),

American robin (*Turdus migratorius*), and western meadowlark were observed flying and perched on the branches. Killdeer (*Charadrius vociferus*) also were present on the ground near the perimeter of the PWRF.

City Parcel

General Conditions

The 40-acre west half of the City parcel contains several weedy crop grass species, an indicator of past disturbance in the area. Some parts of the parcel are barren and have exposed soils, while others are overgrown with dense stands of weedy non-native forbs. A few small patches of sagebrush do exist in the central part of the parcel. Near the north side of the City parcel, some large mounds exist that were created from discarded excavated material for the construction of the existing PWRF winter storage lagoons and other facilities. In the northeast corner of the western half, earth is mounded and the City is storing gravel piles, asphalt, and other materials/equipment from facility operations. In the southeast corner of the western half, the City constructed the IPS building. The BPA overhead power line/easement and access road crosses the southeast corner of this parcel. There is an earthen access roadway that bisects the parcel from southwest to northeast.

Vegetation

The City parcel generally is characterized by a plant community dominated by cheatgrass, dense stands of tumble mustard, and Russian thistle, with a single small stand of basin big sagebrush and interspersed pockets of common rabbitbrush and native forbs and grasses.

Grasses are common on the City parcel, including cheatgrass, crested wheatgrass (*Agropyron cristatum*), cereal rye, bulbous bluegrass, native Indian rice grass (*Achnatherum hymenoides*), and squirreltail (*Elymus elymoides*). Dense forb communities include tumble mustard, fiddleneck, Russian thistle, rush skeletonweed (*Chondrilla juncea*), and native wild lemonweed (*Ladeania lanceolata*). A stand of basin big sagebrush is present near the center of the bisected parcel, and common rabbitbrush sparsely populates the parcel throughout. A small Columbia prickly pear (*Opuntia columbiana*) also is present approximately 200 feet east of the sagebrush stand. Some cryptobiotic soil crust was observed in barren, open spaces on the undisturbed parts of the parcel. Table 5 summarizes the dominant vegetation on the City parcel.

Table 5. City Parcel Dominant Plant Species

Parcel No.	Dominant Grass	Dominant Forb	Dominant Shrub
113090085 (City)	Cheatgrass, crested wheatgrass	Tumble mustard, Russian thistle, wild lemonweed	Basin big sagebrush, common rabbitbrush

Wildlife

A total of seven burrows were recorded throughout the western half of the City parcel. Burrows generally occurred near other burrows, with some appearing deeply excavated and potentially

connected to one another. Burrow nos. 10, 11, and 12, which are anticipated to have been created by American badgers, were observed in an area with low growing cheatgrass (*Bromus tectorum*) near a small patch of basin big sagebrush. Burrow nos. 13 and 14, which are anticipated to have been created by coyotes, were in a shallow valley with disturbed soils and dug into the hillside. Burrow nos. 15 and 16 were approximately 450 feet northeast of burrow nos. 13 and 14 and had similar characteristics (i.e. dug into a hillside, disturbed soils, likely created by coyotes) but were significantly larger. Of the burrows recorded, it is hypothesized that four were created by coyotes, three were created by American badger, and 3 are suitable habitat for burrowing owl. Table 6 summarizes the burrow observations on the City parcel.

Table 6. City Parcel Burrow Observations

Parcel No.	Number of Burrows	Primary Species Association	Suitable Habitat for Burrowing Owl	Other Notes
113090085 (City)	7	Coyote, American badger	3 burrows	Burrows on north side of parcel are in disturbed soil on hillside

Several lark sparrows were observed throughout the City parcel on roadways, perched atop shrubs, and on discarded debris piles. Many pinacate beetles (*Eleodes sp.*) also were observed on sandy mounds in front of burrows on the City parcel. Unidentified large black spiders were present on webs that spanned the entrance to many of the burrows observed. A single eastern cottontail rabbit (*Sylvilagus floridanus*) was flushed from shrubs on the north side of the parcel.

North Parcel

General Conditions

The 80-acre north parcel is a hilly area with low growing vegetation that is frequently grazed by cattle. Rolling hills span from the southwest to the northeast on the parcel and are relatively large compared to most other areas of the PWRF project site. There is a cattle trail from northwest to southeast on the parcel, and an earthen access road along the western parcel boundary. A moderately high plant diversity is present on the parcel, with a predominance of rabbitbrush; however, no sagebrush species were observed. Cattle use of the site is evident throughout.

Vegetation

Vegetation on the north parcel is characterized by extensive stands of mixed rabbitbrush with low, grazed grasses and a relatively diverse community of grazed forbs.

The north parcel is a heavily grazed area with large intact mixed stands of green rabbitbrush (*Chrysothamnus viscidiflorus*) and common rabbitbrush. Areas not dominated by rabbitbrush consist of plentiful cheatgrass with wild lemonweed, fiddleneck, and some tumble mustard interspersed throughout. Other grasses include bulbous bluegrass and needle-and-thread grass that is low from recent grazing. Open, sparsely vegetated areas with woolly plantain (*Plantago*

patagonica) are also common. Other forbs recorded during survey include pale evening primrose (*Oenothera pallida*), common borage (*Borago officinalis*), rush skeletonweed, and common stork's-bill (*Erodium cicutarium*). Columbia prickly pear was found in three different locations in the area. Cryptobiotic soil crust was observed throughout the parcel. **Table 7** summarizes the dominant vegetation on the north parcel.

Table 7. North Parcel Dominant Plant Species

Parcel No.	Dominant Grass	Dominant Forb	Dominant Shrub
113090058 (North)	Cheatgrass, bulbous bluegrass	Wild lemonweed, fiddleneck, tumble mustard	Common rabbitbrush, green rabbitbrush

Wildlife

No burrows were detected on the north parcel during RH2 site investigations and surveys.

Lark sparrow and western meadowlark were observed on the ground and on nearby overhead power lines on the north parcel. A single double-crested cormorant (*Phalacrocorax auritus*) was observed flying overhead during survey. Throughout the parcel, cow dung was prevalent in open, grazed areas. Bones from a large unidentified animal also were found in a couple locations throughout the parcel. Many pinacate beetles were observed on the ground in areas with sandy mounds.

Northeast Parcel

General Conditions

The 80-acre northeast parcel is characterized by some steeper slopes and hilly areas on its south side contrasted with the vast open flat areas on the north side of the parcel. Hilly areas are associated with large intact swaths of shrub-steppe habitat consisting of sagebrush, rabbitbrush, and buckwheat (*Eriogonum spp.*). The north side of the parcel is frequently grazed by cattle; however, it has retained a relatively high diversity of shrub-steppe vegetation compared to other parcels in the project area. Some earthen cattle trails are found on the parcel that cross from southeast to northwest and from southwest to northeast. The parcel is surrounded by agricultural fields and a cattle feedlot to the northwest.

Vegetation

The northeast parcel generally is characterized by a plant community of large intact sagebrush patches with rabbitbrush and a diverse community of forbs and grazed grasses.

The northeast parcel contains large contiguous patches of Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*), with some stands intermixed with basin big sagebrush, common rabbitbrush, and a few green rabbitbrush. Unidentified buckwheat shrubs also were observed, mostly near the southern end of the parcel. The north side of the parcel, north of the hilly areas near the southern border, is heavily grazed, and much of the vegetation is low growing. Cheatgrass is prevalent with some bulbous bluegrass, barley (*Hordeum sp.*), and Idaho fescue

(*Festuca idahoensis*). Forbs encountered on transects include wild lemonweed, hedge mustard (*Sisymbrium officinale*), tumble mustard, fiddleneck, red belvedere (*Bassia scoparia*), rush skeletonweed, pale evening primrose, common stork's-bill, woolly plantain, desert parsley, and some yarrow. Columbia prickly pear was recorded at four different locations, with a large specimen in the southwest corner of the parcel. Cryptobiotic soil crust was observed throughout the parcel. **Table 8** summarizes the dominant vegetation observed on the northeast parcel.

Table 8. Northeast Parcel Dominant Plant Species

Parcel No.	Dominant Grass	Dominant Forb	Dominant Shrub
124710054 (Northeast)	Cheatgrass, bulbous bluegrass	Wild lemonweed, fiddleneck, tumble mustard	Wyoming big sagebrush, common rabbitbrush

Wildlife

A total of two burrows were recorded on the northeast parcel. Burrow no. 1, which is anticipated to have been excavated by an American badger, has a 14-inch-wide, 7-inch-tall opening that is dug deep below the soil surface. A large open sand mound that tapers to the burrow entrance is present. Burrowing owl adult and juvenile feathers were observed on the sand mound in front of the burrow. Juvenile and adult owl feathers were found in clumps that indicated recent predation. A small pellet with an intact rodent skull also was found nearby. Burrow no. 17, which is hypothesized to have been excavated by an American badger, is found on the southern edge of the northeast parcel near the edge of an agricultural field and a Wyoming big sagebrush stand. The area is generally open and grazed with good horizontal visibility. The burrow has a 9.5-inch-wide, 7-inch-tall round opening and the interior measurement was approximately 2 feet, 8 inches to the back wall. No signs of animal activity or use were present in or around burrow no. 17. Both burrows recorded on the northeast parcel are considered suitable habitat for burrowing owls. **Table 9** summarizes the burrow observations on the northeast parcel.

Table 9. Northeast Parcel Burrow Observations

Parcel No.	Number of Burrows	Primary Species Association	Suitable Habitat for Burrowing Owl	Other Notes
124710054 (Northeast)	2	American badger	2 burrows	Northeast burrow has evidence of past use by burrowing owl (feathers, pellets)

Many birds were active and observed along the northeast parcel transects, including lark sparrow, western meadowlark, brewer's blackbirds (*Euphagus cyanocephalus*), and a long-billed curlew overhead that was harassing an unidentified raptor. The area is frequented by cattle that are held in an adjacent fenced feedlot area. Cow dung is prevalent throughout the parcel. A coyote pelt also was found near the north end of the parcel.

Summary

The subject parcels all have varying quantities of mostly low to moderate quality shrub-steppe habitat. The northeast parcel contains the greatest quantity of moderate to high quality, intact shrub-steppe habitat, which is confirmed to support burrowing owl. The south, and to a lesser extent, City parcels contained isolated pockets of low to moderate quality shrub-steppe habitat, although both parcels are disturbed from past land use practices. The north parcel is the most disturbed and actively grazed parcel, which has resulted in conversion of this parcel and represents the parcel with the lowest overall quality and quantity of shrub-steppe habitat.

Large shrub-steppe patches are important to sensitive wildlife (WDFW, 2011), especially sagebrush associated and sagebrush obligate species. Connectivity between shrub-steppe patches is also important, as most shrub-steppe dependent mammals do not move between patches that are over 200 meters apart (WDFW, 2011). The northeast parcel has the largest intact shrub-steppe habitat and greatest connectivity between patches, which is of high conservation priority. Other parcels in the study area have relatively small, fragmented patches of low quality or entirely absent shrub-steppe habitat. Surrounding land uses of all parcels are primarily agricultural, with residential and industrial land uses to the southwest. Studied parcels, at a landscape scale, represent a highly fragmented shrub-steppe biome with site-specific benefits for dependent wildlife, especially birds.

The only evidence of a state wildlife species of concern that was detected during site investigations and surveys was burrowing owl. Burrows recorded in the project area are hypothesized to have originally been excavated by coyote or American badger. Most of the burrows observed are not suitable for burrowing owl due to overgrown surrounding vegetation and hilly terrain with poor horizontal visibility. Burrows that were determined to be suitable habitat for burrowing owl are surrounded by sparse, low growing vegetation, are on gently sloping or flat terrain, and have an opening that is at least 6 inches wide. This criterion is consistent with findings that burrowing owls utilize burrows excavated by other animal species that are near early successional plant communities and have good horizontal visibility (Johnson, et. al., 2010).

No ESA-listed species or suitable habitat were observed during RH2 surveys. The project area is not anticipated to possess the qualities needed to support life history and habitat requirements of any USFWS or NMFS ESA-listed species. No critical habitat exists for any of the listed species within the PWRF Improvements project area.

Discussion

Following surveys by RH2, the results of site investigations were preliminary conveyed via email and virtual meetings to Reclamation, WDFW, Ecology, and the County. It is anticipated that the PWRF Improvements will involve conversion of land use for all the subject parcels, thereby impacting existing shrub-steppe habitat.

This report will be used by Reclamation in support of ESA consultation with USFWS and in quitclaim of the properties to the City.

For Ecology, this report will be used in support of SERP compliance. SERP includes State Environmental Policy Act (SEPA) and public participation, Environmental Justice, Section 106, and other environmental resource documentation/processes.

For the County, the shrub-steppe habitat present on all the parcels is considered a Fish and Wildlife Conservation Area, regulated as part of the County's Critical Areas Ordinance. The County defers to WDFW for management recommendations and mitigation requirements for conversion of shrub-steppe lands. It is anticipated that County, WDFW, and City coordination will occur as part of the land use reviews for this project (i.e. SEPA and Conditional Use Permit).

WDFW and the City are in the process of determining a mitigation approach for the loss of shrub-steppe habitat and impacts to State Species of Concern, burrowing owls. An estimated 90 acres of quality, viable shrub-steppe habitat is expected to be impacted because of this project (reflects the north and south parcels, City parcel, and northeast parcel). WDFW and the City intend to establish a Franklin County specific monetary mitigation agreement for this impact wherein the City will contribute funds for WDFW's ongoing conservation, preservation, and wildlife efforts for shrub-steppe habitat. WDFW email coordination and a draft Mitigation Agreement are included in **Appendix D**. This draft agreement will continue to be refined between the City and WDFW ahead of project improvements.

Conclusion

In preparing this report, RH2 has conformed to the standard of care employed by environmental resource professionals. The information presented is true and accurate to the best of our knowledge. No other representation or warranty is made or implied. If you require additional information, please contact me at (425) 951-5436 or apettibone@rh2.com.

RH2 ENGINEERING, INC.



Alicia Pettibone
Environmental Project Manager

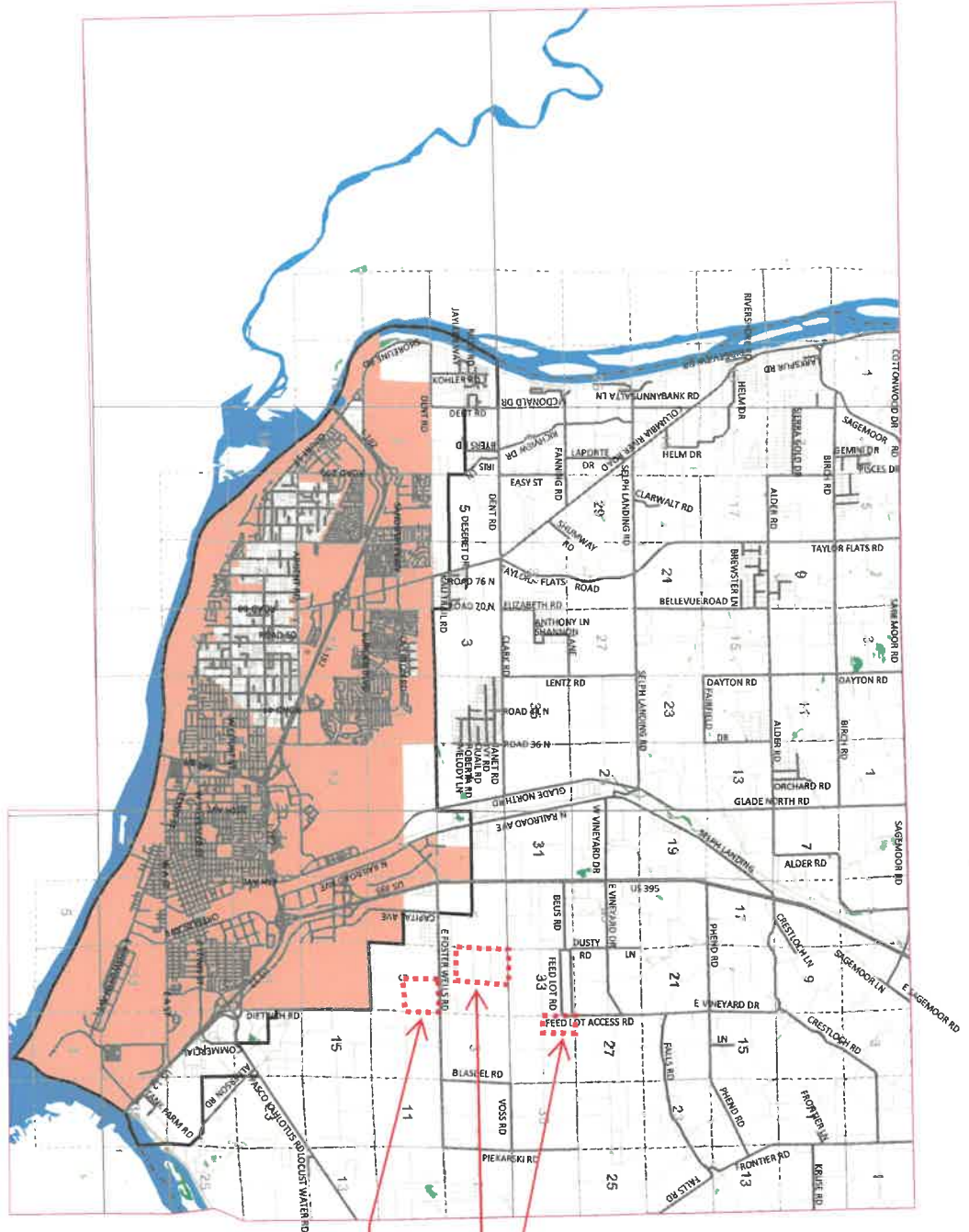
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Appendix A

Background Environmental Data



Parcel of Interest

Project Area

- Legend**
- Townships
 - Sections
 - Franklin County
 - Roadways
 - Urban Growth Areas
 - City Limits
 - Wetlands
 - Rivers and Lakes

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Franklin County, Washington

WETLANDS

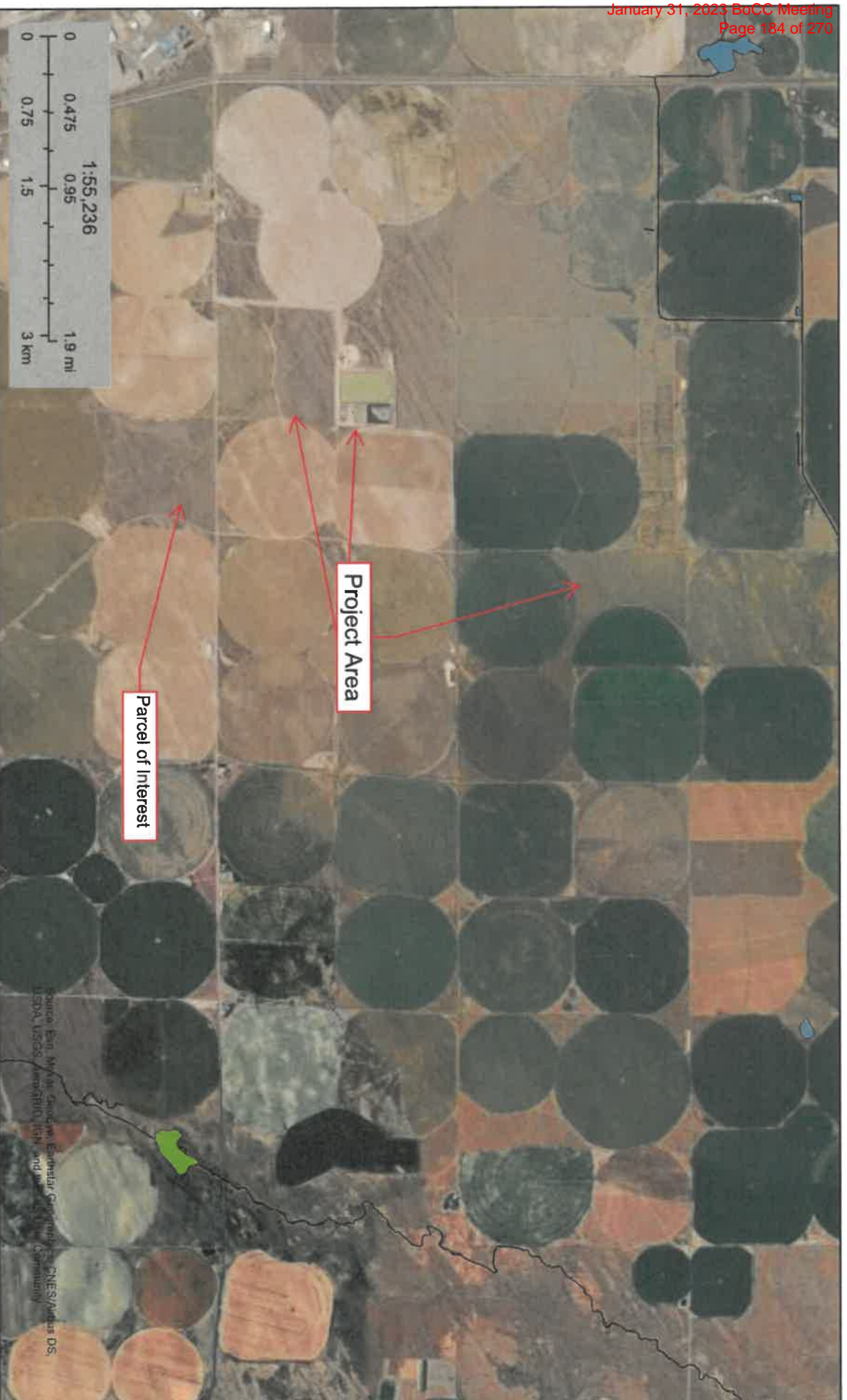
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http://www.co.franklin.wa.us
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Wetlands



March 29, 2022

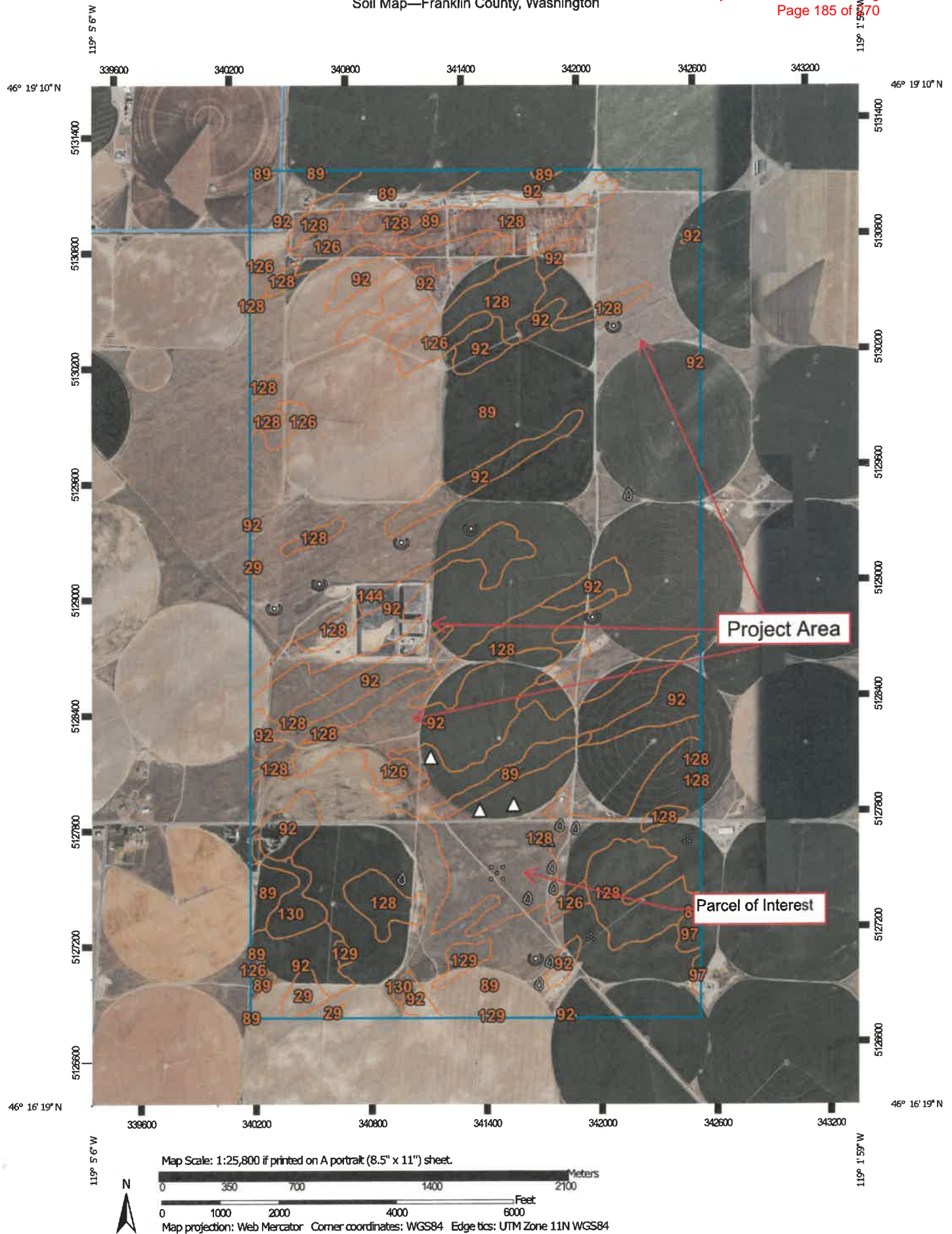
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland




































- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Area of Interest (AOI)	 Stony Spot
Soils	 Very Stony Spot
 Soil Map Unit Polygons	 Wet Spot
 Soil Map Unit Lines	 Other
 Soil Map Unit Points	 Special Line Features
Special Point Features	Water Features
 Blowout	 Streams and Canals
 Borrow Pit	Transportation
 Clay Spot	 Rails
 Closed Depression	 Interstate Highways
 Gravel Pit	 US Routes
 Gravelly Spot	 Major Roads
 Landfill	 Local Roads
 Lava Flow	Background
 Marsh or swamp	 Aerial Photography
 Mine or Quarry	
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodid Spot	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Franklin County, Washington
Survey Area Data: Version 19, Aug 23, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 28, 2014—Nov 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
29	Hezel loamy fine sand, 0 to 15 percent slopes	11.1	0.4%
89	Quincy loamy fine sand, 0 to 15 percent slopes	1,534.2	60.1%
92	Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes	464.4	18.2%
97	Quincy-Hezel complex, 0 to 15 percent slopes	6.9	0.3%
126	Royal loamy fine sand, 0 to 10 percent slopes	49.6	1.9%
128	Royal fine sandy loam, 0 to 2 percent slopes	455.4	17.8%
129	Royal fine sandy loam, 2 to 5 percent slopes	11.3	0.4%
130	Royal fine sandy loam, 5 to 10 percent slopes	19.6	0.8%
144	Sagemoor very fine sandy loam, 0 to 2 percent slopes	2.1	0.1%
Totals for Area of Interest		2,554.6	100.0%



Projects In Map View

Download Current View
Show All / Hide All

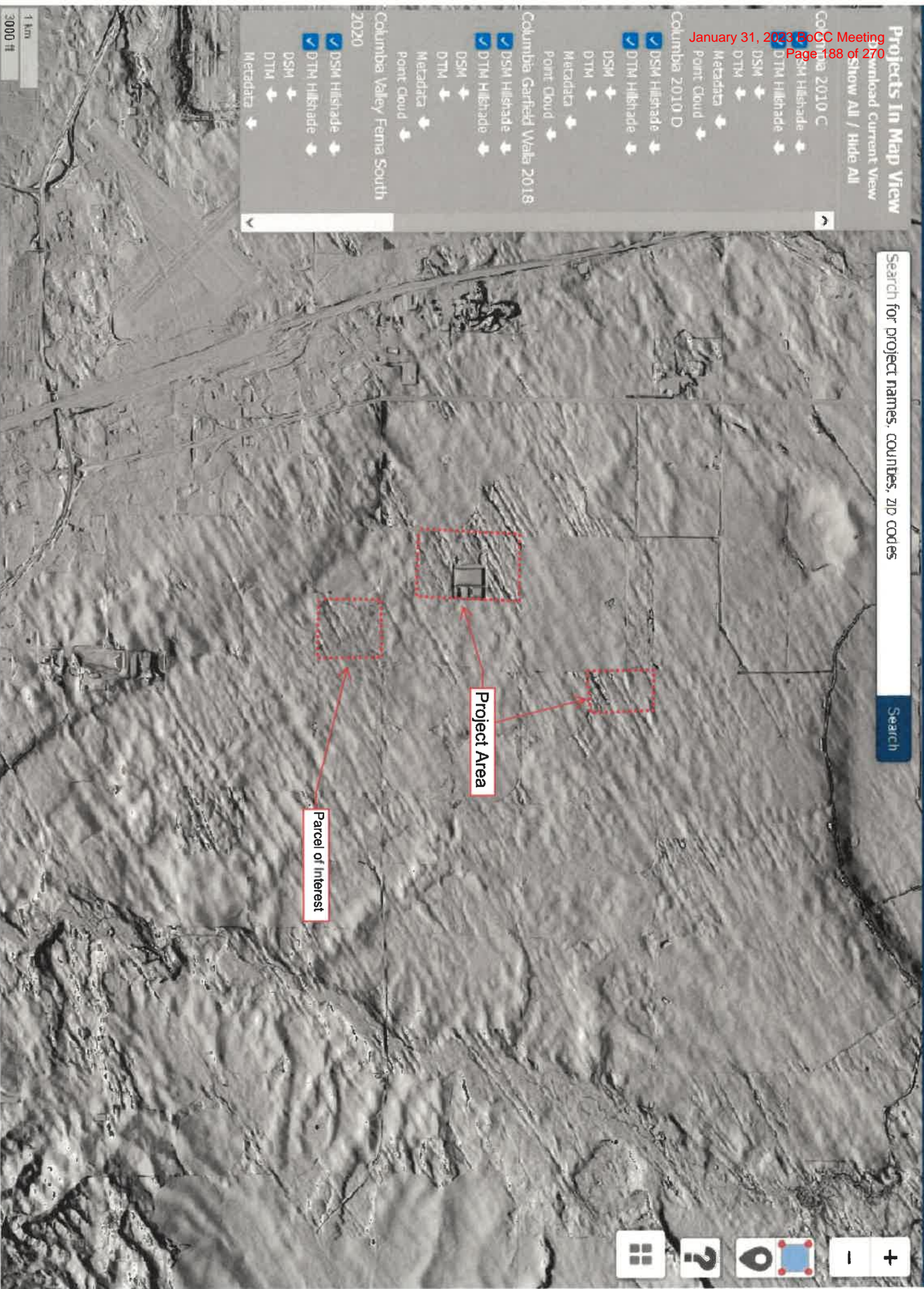
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 - Point Cloud
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 - Metadata

Search for project names, counties, zip codes

Search

Project Area

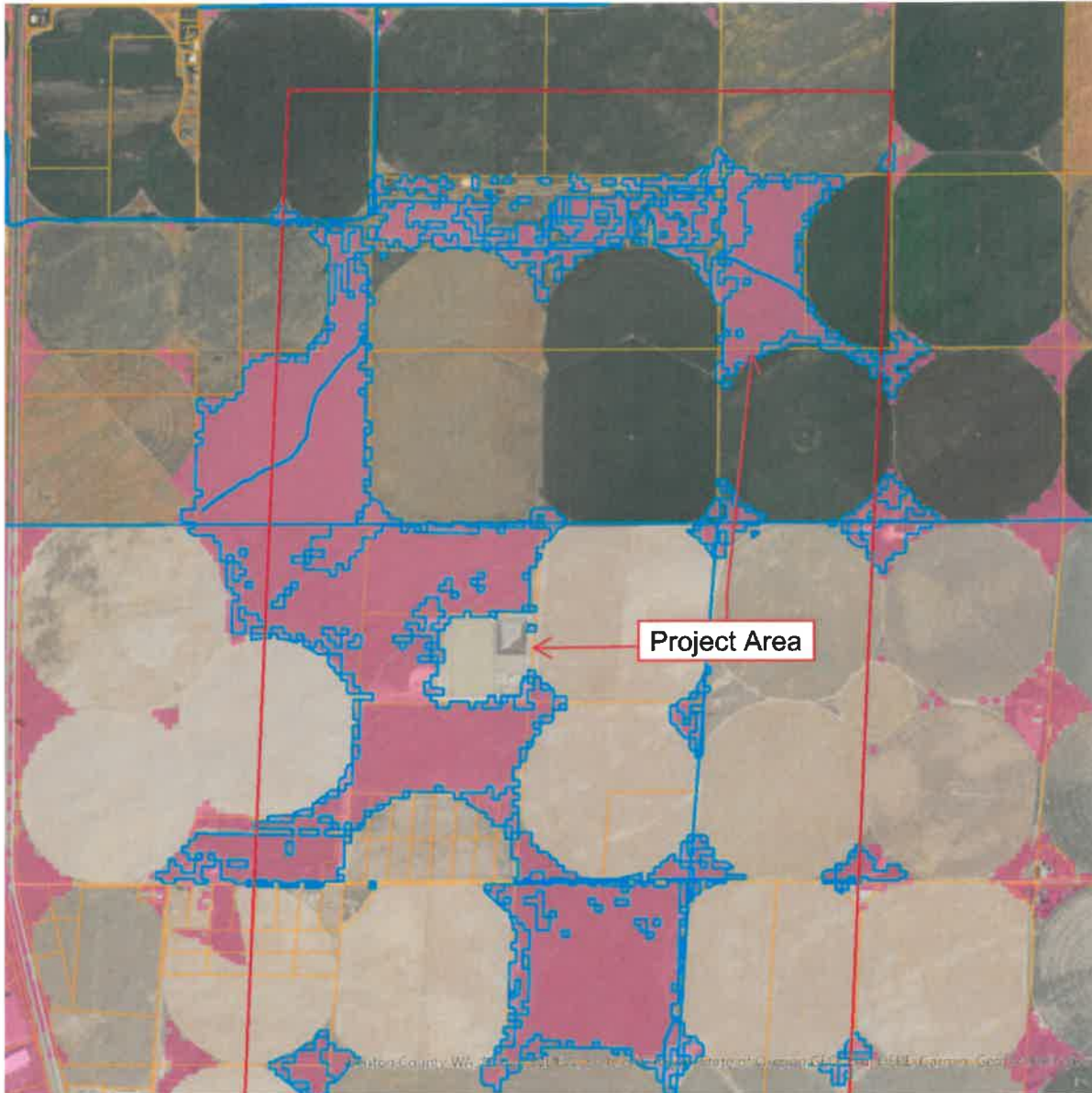
Parcel of Interest



1 km
3000 ft



Priority Habitats and Species on the Web



Report Date: 06/28/2022

PHS Species/Habitats Overview:

Occurrence Name	Federal Status	State Status	Sensitive Location
Riverine	N/A	N/A	No
Shrubsteppe	N/A	N/A	No
Washington ground squirrel	N/A	Candidate	Yes
Greater Sage-grouse	Fed Spp Concern	Threatened	Yes

PHS Species/Habitats Details:

Riverine	
Priority Area	Aquatic Habitat
Site Name	N/A
Accuracy	NA
Notes	Wetland System: Riverine - NWI Code: R4SBCx
Source Dataset	NWIWetlands
Source Name	Not Given
Source Entity	US Fish and Wildlife Service
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html
Geometry Type	Polygons

Shrubsteppe	
Priority Area	Habitat Feature
Site Name	Franklin County Presumptive Shrubsteppe
Accuracy	NA
Notes	General location of Shrubsteppe. Confirm or refute with site-scale info. WDFW recommends using site-scale info to inform site-scale land use decisions. Expect that on-the-ground conditions (e.g., boundaries) will vary from the map.
Source Record	920866
Source Name	Keith Folkerts, WDFW
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
Geometry Type	Polygons

Shrubsteppe	
Priority Area	Habitat Feature
Site Name	Franklin County Shrubsteppe
Accuracy	NA
Notes	General location of Shrubsteppe. Confirm or refute with site-scale info. WDFW recommends using site-scale info to inform site-scale land use decisions. Expect that on-the-ground conditions (e.g., boundaries) will vary from the map.
Source Record	920867
Source Name	Keith Folkerts, WDFW
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
Geometry Type	Polygons

Shrubsteppe	
Priority Area	Habitat Feature
Site Name	Franklin County Shrubsteppe
Accuracy	NA
Notes	General location of Shrubsteppe. Confirm or refute with site-scale info. WDFW recommends using site-scale info to inform site-scale land use decisions. Expect that on-the-ground conditions (e.g., boundaries) will vary from the map.
Source Record	920867
Source Name	Keith Folkerts, WDFW
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
Geometry Type	Polygons

Washington ground squirrel	
Scientific Name	<i>Urocitellus washingtoni</i>
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	N/A
State Status	Candidate
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	Y
Display Resolution	QTR-TWP

Greater Sage-grouse	
Scientific Name	<i>Centrocercus urophasianus</i>
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	Fed Spp Concern
State Status	Threatened
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	Y
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00026

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Franklin County, Washington



Local office

Washington Fish And Wildlife Office

☎ (360) 753-9440

📠 (360) 753-9405

510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

Gray Wolf *Canis lupus*

Endangered

There is final critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/4488>

Birds

NAME

STATUS

Yellow-billed Cuckoo *Coccyzus americanus*

Threatened

There is final critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/3911>

Fishes

NAME

STATUS

Bull Trout *Salvelinus confluentus*

Threatened

There is final critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/8212>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Flowering Plants

NAME

STATUS

White Bluffs Bladderpod *Physaria douglasii* ssp.

Threatened

tuplashensis

Wherever found

There is final critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/5390>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Bull Trout <i>Salvelinus confluentus</i> https://ecos.fws.gov/ecp/species/8212#crithab	Final
White Bluffs Bladderpod <i>Physaria douglasii</i> ssp. <i>tuplashensis</i> https://ecos.fws.gov/ecp/species/5390#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional

information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Dec 1 to Aug 31

Black Tern *Chlidonias niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3093>

Breeds May 15 to Aug 20

Cassin's Finch *Carpodacus cassinii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9462>

Breeds May 15 to Jul 15

Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jun 1 to Aug 31

Evening Grosbeak *Coccothraustes vespertinus***Breeds May 15 to Aug 10**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Franklin's Gull *Leucophaeus pipixcan***Breeds May 1 to Jul 31**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lesser Yellowlegs *Tringa flavipes***Breeds elsewhere**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Lewis's Woodpecker *Melanerpes lewis***Breeds Apr 20 to Sep 30**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

Long-eared Owl *asio otus***Breeds Mar 1 to Jul 15**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3631>

Marbled Godwit *Limosa fedoa***Breeds elsewhere**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Olive-sided Flycatcher *Contopus cooperi***Breeds May 20 to Aug 31**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

Rufous Hummingbird *selasphorus rufus***Breeds Apr 15 to Jul 15**

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Sage Thrasher *Oreoscoptes montanus***Breeds Apr 15 to Aug 10**

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9433>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

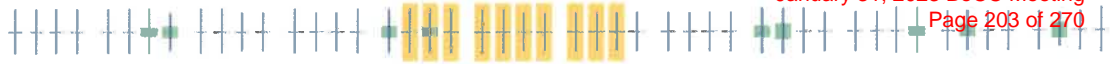
Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



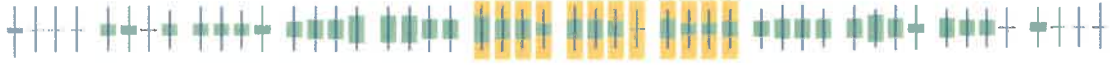
Cassin's Finch
BCC

Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Clark's Grebe
BCC

Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



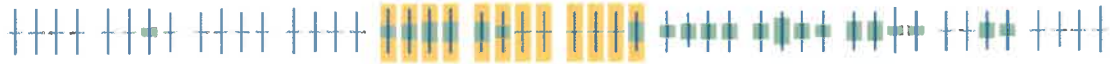
Evening
Grosbeak
BCC

Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Franklin's Gull
BCC

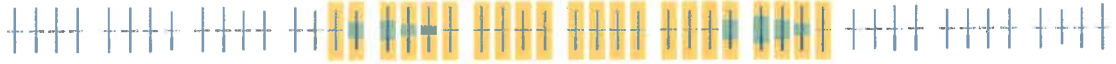
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



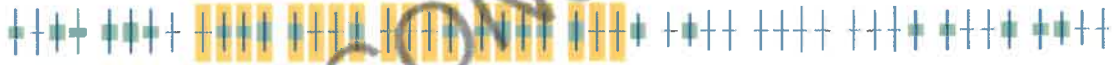
Lesser
Yellowlegs
BCC
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Lewis's
Woodpecker
BCC
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)

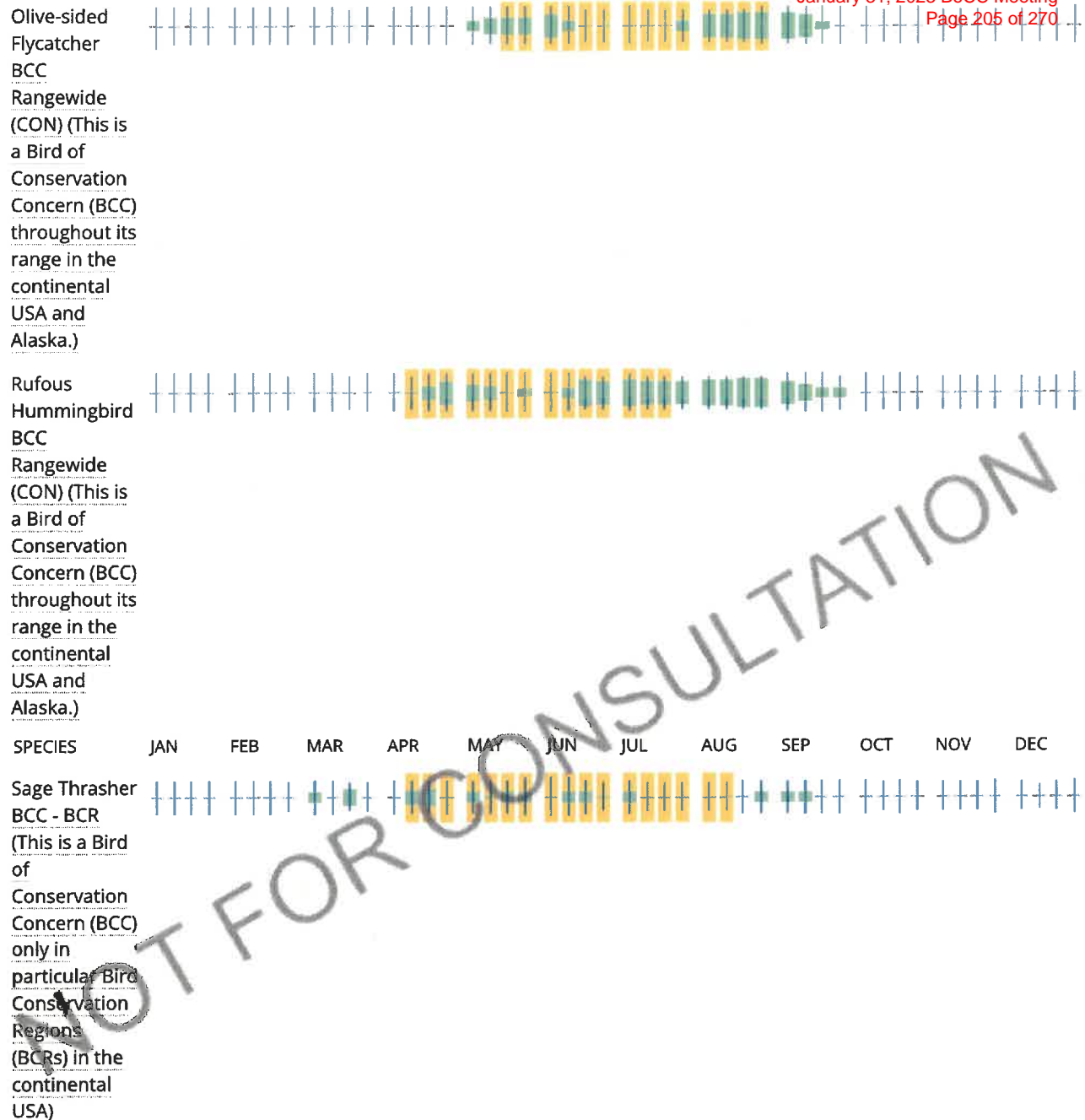


Long-eared
Owl
BCC
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Marbled
Godwit
BCC
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern \(BCC\)](#) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species

of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501

et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands

Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix B

Field Maps and Data

TRANSECT BASELINE
LENGTH ~1,383 LF

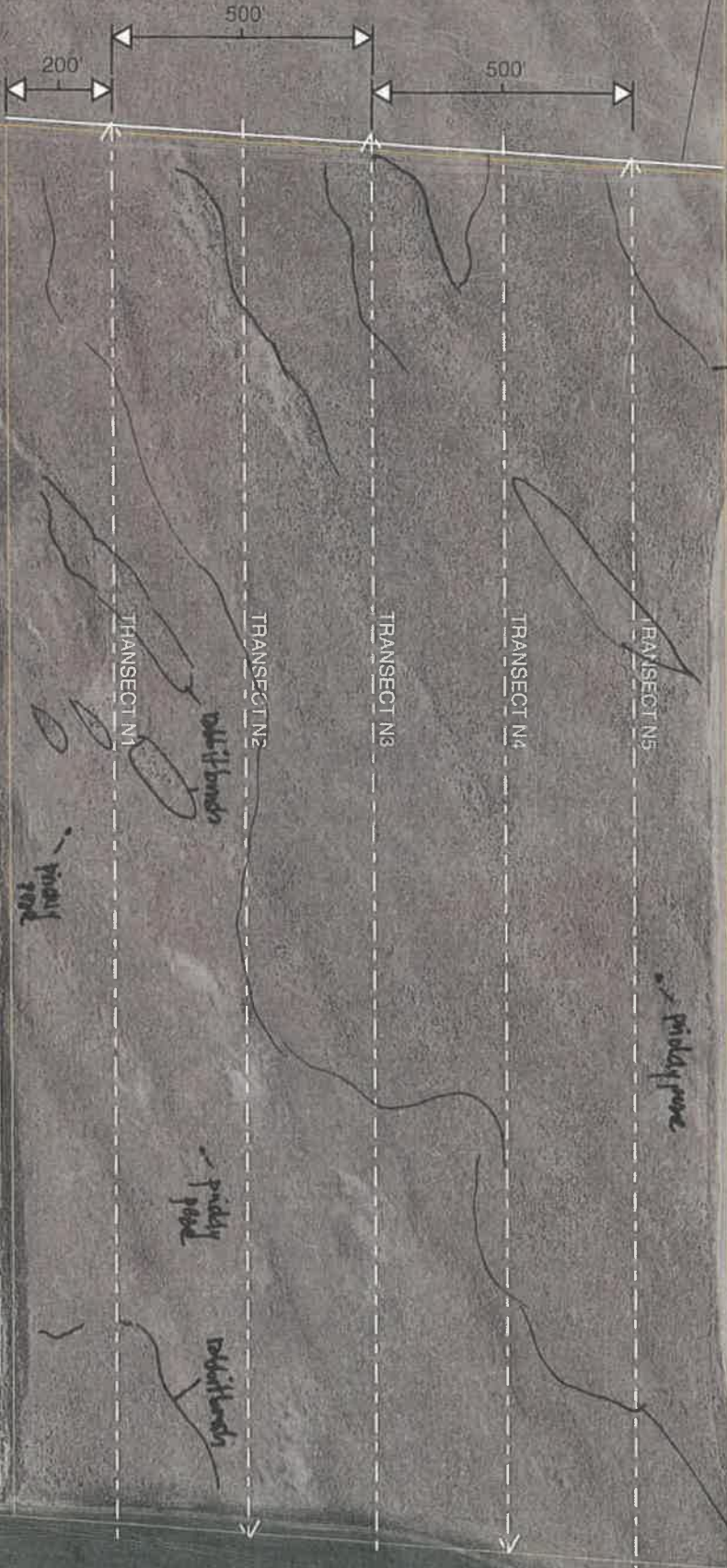


NOTE: STAKE TRANSECTS AT
DISTANCE SPECIFIED OFF OF THE
NE AND SE PROPERTY CORNERS.
STAKE ALONG BOTH E AND W
PROPERTY LINES WITH 1 STAKE
MID-POINT ALONG THE TRANSECT
FOR A TOTAL OF 3 STAKE
MARKERS PER TRANSECT.

TRANSCT BASELINE
NGTID: -1,378 LF



TRANSECT BASELINE
LENGTH: ~1,367 LF



NOTE: STAKE TRANSECTS
AT DISTANCE SPECIFIED
OFF OF THE NE AND SE
PROPERTY CORNERS.
STAKE ALONG BOTH E AND
W PROPERTY LINES WITH 1
STAKE MID-POINT ALONG
THE TRANSECT FOR A
TOTAL OF 3 STAKE
MARKERS PER TRANSECT.

PSC PWRP
NORTHEAST 80-ACRE USBR PARCEL
RH2 FIELD MAP

January 31, 2023 BoCC Meeting

Page 214 of 270

TRANSECT BASELINE
LENGTH: ~1,347 LF

d Lot N Rd

Edwards Rd

NOTE: PROPERTY BOUNDARY
IS MISSING IN VIEWPORT.
STAKE TRANSECTS AT
DISTANCE SPECIFIED OFF OF
THE NW AND NE PROPERTY
CORNERS. STAKE ALONG BOTH
N AND S PROPERTY LINES WITH
1 STAKE MID-POINT ALONG THE
TRANSECT FOR A TOTAL OF 3
STAKE MARKERS PER
TRANSECT.

TRANSECT NE1

TRANSECT NE2

TRANSECT NE3

TRANSECT NE4

TRANSECT NE5

Google Earth

N

1000 ft

PWRF 6:40 - 2:00

5/21/22

NE PARCEL:

NE1 of 3:

vegetation:

amynkia

plantago

chest

gray rabbitbrush

wyoming big sage

erigononum - buckwheat

opuntia polyacantha

erodium - purple flower

poa

evening primrose

brassicaceae - tall

pea family

yellow

hordeum

black beetles -

elodes obscura?

western meadowlark

crickets!

red ants

download park - Martin

changing card

binoculars

~~gettag photos app~~

wipes

poop shovel

TP

NE2 of 3:

gray rabbitbrush

tragopogon dubius - yellow salix

amynkia

plantago erecta

erodium

wyoming big sagebrush

primrose

brassicaceae

native aster

buckwheat

phacelia

chest

pea

yellow

poa

cows, beetles, lark,

PWERF

NE parcel

NE-3:

green & gray rabbitbrush

chest

amynkia

pea

salicy

aster

poa

phlox

phlox

planes
overhead

ants, cow pies

western lark

burrowing owl - unoccupied den & massacre

N parcel

N-3; N2,

amynkia

pea

chest

mustard

gray rabbit

poa

gr rabbit

phlox

erodium

undulating, weedy

yellow

plantain

indian rice grass

fescue - grazed

primrose

phacelia linearis

western

shrike

sparrow

6/8/22 PWRP

SOUTH PARCEL:

S1- 8:30 - 10:30

W-E

cereal rye*

mustard

gray rabbitbrush

chest*

enogonum

yarrow

yellow salify

amynkia

phlox longifolia

poa bulbosa

prickly lettuce

russian thistle

basin big sagebrush

needle & thread grass

desert parsley

pea family - laedania

hordeum

tumble mustard

mourning dove

crickets

dragon fly

quail?

butterfly

barn swallow

western meadowlark

RWBB

forb:

yarrow, am, phlox

low invasives, just poa

ATT:

biotic crust - young

needle & thread

10:30 - 12:30 F W

January 31, 2023 BoC Page 2

orange brush patch:
ATT & w/young bird
bird

ME
justify

burrows
12, 3, 4, 5, 6

grey rabbitbrush
pos bulbs
jumble mustard

yellow finch	homed lark
pinkish bellbird	lark sparrow?

mission - muscle
on stage with
core stat?
and stat?

synthesis	medium ink
needle thread	other manual cost

3 1:30-7:15
hardern
phlox
W-E

under quarters	grey rabbit	mouse track
redly leftuce	green rabbit	biotic amct

with thick	various	
fragile	young	small bands 1-3"

pes family
ability

8-3

burrows 8,
no signs of animal activity
9" opening

dispositi
in Kraft

S-4	2.15-3.00	E-M
-----	-----------	-----

Starbail	48T	biotic craft
basidiaceae	1011um	western midlatitude

$N \neq$	$\frac{f}{f_{\text{res}}}$	broaden q.
obvious	damping	

gray rabbit prince
-gray of rabbit

phlox
pinkly white
pinkly

~~act not learning~~ middle profile
act not learning kochia

Pos

S-S 3:00-4:00 W-E Killdeer

ry	brinus	soloff
bobfthmch	josnkie	miller hill

KodmL	pea	needed time
bh/or	base/case	memory drive

middle place *yamw* *reben*

[illegible]

(W)

8-4 2.15-3.00

shakill MAT
bassicaceae Polium

NE	HE
balans	overlij

gray rabbit	prince
gray rabbit	prince

phlox
pinkly white
pinkly

~~act not learning~~ middle profile
act not learning kochia

Pos

S-S 3:00-4:00 W-E Killdeer

ry	brinus	soloff
bobfthmch	josnkie	miller hill

Kodak	pea	need more
bhix	base/case	mumphy drive

middle place *yellow*

Inde sportiv

CIT Parcel:

(4)

C-1: 4:30-4:45

E-W

around PS, soaked:

disturbed, graded

lilium perenne

twisted mustard

crested wheatgrass

chest

hardstem

ansynkia

ME

prickly lettuce

western thistle

hardstem

gray rabbit

pinon

salvify

pos

C-2- 4:45-5:10

W-E

pos bulbosa

mustard

chest

ansynkia

pos

adenanthum

ME

western thistle

lilium perenne

crested wheatgrass

6/9 6:15 hotel leave; 6:30 onsite
CIT Parcel

(5)

C-3: 6:50-7:50a E-W undulating parcel

lewis flex

gray rabbit

brunus

ansynkia

basiscicase

prickly lettuce

agropyron

western thistle

Yarrow

Sagebrush-AT

festuca

astragalus

lilium

salvify

erodium

lidenia-pis

evening primrose

pos bulbosa

prickly pear

ME

killdeer

eleadus W-E

gray rabbit

brunus

mustard

prickly lettuce

ansynkia

western thistle

lidenia

salvify

mush skeleton weed

eleadus beetles

larvic crust

ants

grasshopper

burnw 10

7" eleadus

7" high

no other animal activity

burnw 11

8" spider

burnw 12

9" spider uses

burnw 13

12" relic, inactive

burnw 14

9" relic, inactive

burnw 15

burnw 16

burnw 17

burnw 18

6/10/22

OVERH PARCEL

6:45 from hotel to site

(10)

N-1: 7:30-7:45

N-E

shrikebill

evening primrose

amysia

cowbird
lark sparrow
eleodes

mustard

chest

PMPF scrub!

gray rabbit

ladybird

killdeer

green rabbit

N-2: 7:50-8:15

E-W

poa bulbosa

gray rabbit

ants

ladybird

yellow

owls
eleodes

mustard

phlox

owl hawk

amysia

phlox

chest

primrose

green rabbit

phlox

shrikebill

N-3: 8:20-8:45

N-E

(11)

gray's green rabbit

chest

yellow

cow pie
bird ant

amysia

yellow

primrose

mustard

yellow

plains

shrikebill

yellow

eyes in farm

yellow

phlox

field

phlox

N-4: 8:50-9:25

E-W

ladybird

yellow

biotic crust

chest

shrikebill

lark sparrow

mustard

poa bulbosa

heron

amysia

gray's green rabbit

lark sparrow

primrose

yellow

killdeer

phlox

phlox

double-crested

phlox

lark sparrow

eleodes

phlox

lark sparrow

eleodes

PWRF Transect Recon

5/27/22

TR NE 1 of 3:

patch @ south

- *Amsinckia*, *P. bulbosa*, *ARTE* *wyoming*, *Eriogonum*
Eriogonum, *Erodium cicutarium*, *Fabaceae*
Delicate, *Opuntia polyacantha*, *BRT*
crust, *Oenothera*, *ARTE* W lower 1/2 patch
(*ERNA*), unknown fuzzy plant

Grazing active

Generally - low % *ARTE* cover (few patches)

- No bunchgrass - some higher % cover forbs
(*Amsinckia*, *Erodium*, *Ladleania lanceolata*
Agoseris)

Meadow larks, beetles, ants

TR NE 2 of 3:

patches

- *BRT*, *Erodium*, *ARTE*, *ERNA*, *ACMI*,
Phacelia hastata, *Eriog.*, *P. bulbosa*,
Fabaceae, *Amsinckia*, crust, yellow, mustard
Phlox longistylia, *Ladleania lanceolata*

TR NE 3 of 3:

Chrysanth. viscidiflorus (south end)

Same com as above - *ARTE* / comm dom 1/2 way

Plantago, *Festuca*?

→ *patagonica*

N Parcel TR 3

From west ⬆

Amsinckia, BRT, Ladenia latifolia, Chrys
psid, (Acanthaceae), ~~Plantago~~, Plantago
lido fescue? (grazed), ERNA, Phlox

TR 2

~ woody ~~fringe~~ undulating

BRT, Ladenia, P. bulbosa, ERNA
ACMI (small), Sysm. alb. ⬆

N Parcel TR 3

From west

Amshukia, BRTZ, Ladenia latifolia, Chrys
v. scud, (Acrathenium), ~~Phlox~~, Plantago
Idaho fescue? (grazed), ERNA, Phlox

TR 2

- woody ~~fringe~~ undulating
BRTZ, Ladenia, P. bulbosa, ERNA
ACMI (small), Sysymbrium albr.
Luzia glandulosa

Weds 6/8/22 8AM - Partly sunny
~75°F

South Parcel:

TR1 - ERNO, BRTZ, Tragopogon dubius,
Ac MI, Phlox long, P. bulbosa, Anemone
lactuca semiola, Kalitragus, Sisymbrium albr.
Hesperostipa comata, ARTET,
Lomatium

Tab areas: Phlox, Yarrow White butterflies
JK 2 -

Burrow #2 - 13" wide @ base
(horizontal)

Burrow #3 - 11" wide (humblenec @ entrance)
Burrow #4 14" wide
Rite in the Rain

Adnathenum hymenoides (non dom)
Crust in places

6/9/22 Thurs 6:45 AM

Overcast, 10 mph breeze, ~ 70°F

City Parcel TR 3 -

BK92

TR5 - Dried up mushrooms, crust
mats of BRTZ, Chondulla,

NE Parcel:

TR1 - ARTEW patches, white butterfly
grazing & erosion/compaction

less BRTZ than prev 2 panels.

Erodium, Amaranth, Phacelia, many other
(outside mowing area), ERNA, P. patagonicum
crust @ n end

TR2

Weather is sunny, partly cloudy
8:30 AM

Transect S1

Plants:

~~sp~~ Rye, cheatgrass, gray rabbit brush,
Brassicaceae sp., yellow selfie,
yarrow, phlox, poa bulbosa, barage,
prickly lettuce, russian thistle, tumble
mustard

o Dominant rye, esp. roadside, gray rabbit brush,
yarrow... cheatgrass throughout. Lots of barage.

o Wildlife: crickets, ants, W. meadowlark
nearby

b/w S1-1 and S1-2

o Basin big sagebrush, needle and thread
of grass near, open cheatgrass with
pockets of rabbit brush and basin big
sagebrush stands, some yarrow,
desert parsley

o Some moss w/ lichen soil crust, hard,
patches, near game trail erosion

Small burrow observed, not long and very narrow. Potential cat's claw stretched nearby.
Large patches of rye before S1-2 and near roadway

Look for w. meadowlark, shrike, sage thrasher, sagebrush sparrow
Red winged, swallows overhead
Western meadowlark by roadways,
brown swallows

TRANSECT S2

Start from Ag. field
Dist. marked along roadways,
beginning info were dense rye
- some rabbitbrush patches
- open shrubgrass w/ rabbit and
rye
- some narrow
HOPNET PAPER 7 @ 10:56 AM
Large burrow #1 350 ft east of
middle of S2 signs of fur, small
coat some marked fur inside, sandy
opening in front of opening, 13 ft wide. 8 feet
Scale: 1 square = 1000 sq ft

Burrow #13 @ 11:13 AM 6/8/2022
Less mound in front. No signs of
fur or dirt. 11 in. wide. Dense
rye around. NW of Burrow #12
on S2 line

Burrow #14 @ 11:32 AM 6/8/2022
Just north of Burrow #15. Very
wide opening, small mound in front.
Small gray rabbitbrush near
open sig.

Burrow #15 @ 11:38 AM 6/8/2022
Very large w/ remnant opening on
other side. Base of signpost inside.
Long open with large sandy mound.
No animal signs.

Burrow #16 @ 11:57 AM 6/8/2022
Two sided. large sand mound.
No in @ base under large sand mound.
No animal signs.

Large scat found 4-5 in,
lots of fur

lots of soil crust on west
side of S2

Found pellet w/ small mammal
jaw, other bones. Thick, about
side, 2-3 long.

TRANSECT 53

0-10 FT near road lots of

mustard and prickly lettuce

- turns into rye, some

cheatgrass patches

- some rabbit wash (may be
green)

0 started big west road, walking
south of main transect

0 Blw S2-1 and S2-2 benches

cheatgrass, dominant w/ rabbit wash

- no sagebrush

- scattered yarrow

0 found burrow route w/ lot of
rabbit wash

* across road along PRT easement

- lots of rye on other side

Burrow #17 ① 1:44 PM 6/8/2022

10 m wide, Burrow is at NW

edge. Sand mound near opening.

No signs of burrows, Near

path of sagebrush and NE

of DHP. Burrow #18 ② 1:50 PM

0 large black and white doghouse

on sagebrush

0 found large seat w/ small teeth

and fur, maybe 3/4 inch

wide and 24 in. long

0 some burrow? very little yellow

curly and mustard beyond DHP

some yarrow, meadow chert, rye,

rabbit, and Poa bulbosa

0 some needle and thread near

S2-3

0 found some yellow wire grass and

yellowed milk vetch

TRANSECT 54

0 More rye and chert,

0 2 x w. meadow lark on yellowed

0 several needles, rabbit, mustard rye,

porage

o Some Pulex gonow, Pen bulbosa
o near OTR, Russian Humble
beet rabbit, mustard, borage

Station #9 @ 2:55 PM 6/8/2022

Small sand mound @ opening,
surrounding area is low
vegetation, 9.5 m wide base,
7 m tall.

o Some yellow wild flowers and many
beetles at nest
o Morning dove near nest road
o Russian Humble, meadow
5 fly larvae, 1 beetle

TRANSECT 55

o Lots of the near nest road
o green rabbit brush
o more gray rabbit brush and
dead grass, yellow
o Deer oak there is a
cottonwood in mountain dove,
American robin in meadow
o Northern Kingbird, park sparrow
in deer

Scale: 1 square =

TRANSECT C1 @ 4:21 PM

o Crested wheatgrass and
perennial ryegrass
o Disturbed area near building
grasses may be from seed
mix, rocky soils
o Horseman sp meadow foxglove? \leftarrow
o Turnip mustard (Brassicaceae)
Saturated
tail

o gray rabbit brush, amongst
dead grass and turnip mustard
o n/n. Elodea beetle burrows
o Borage, lots of age near
OTR road, lots more fly on
west side OTR
o Large sparrow on road w/
cricket

TRANSECT C2 Start on west

o Fox bulbosa, Lobelia, borage
o great grass \leftarrow OTR
o Russian Humble
o Similar to C1 in off direction
o less disturbance
o Indian meadow grass

Scale: 1 square =

Area in km

more disturbed soil north of building, dry chest grass

PSC PURF 6/9/2022

Arrived at 6:30, start raised by

7:00am

Cloudy, 67°F

RANSECT C3

Start from east near PURF,

south of transect

chestnut, mustard crested

thistle, some bare and

poa, some dry grass thistle

into lots of mustard and crested

thistle

burdock has small ridges

above generally flat surface, found

pea drill seeded... *burdock*

lots of pea as well, many

pea of a mix w/ wheat

returns to event w/ mustard and

dry version thistle

and overhead

thistle, some sparse grass, rabbit grass

in many areas, lots of dry

peas

Scale: 1 square =

near mid-trous, some white
crest (looks like cat) is probably
phlox, alongside dark brown moss
of plants pretty far ahead - pretty
small and low to ground, 2' wide
3'4' tall... flowering

Burrow #10: @ 7:52 AM 6/9/2022

Several remnants connecting burrow holes,

one large but not as big as others,

round (small) in front of main

hole. Large dense white 7 in.

wide by 7 in. tall opening. No

other wildlife signs. Near sagebrush

(big basin). Cheaty grass around,

good visibility.

Burrow #11. @ 7:41 AM 6/9/2022

Very close to burrow 10 and 12.

Seems like network of tunnels and

exting. Some large rocks ground.

Firm earth movement. 8 in. wide.

Burrow #12 @ 7:42 AM 6/9/2022

9 in. wide. Lots of mustard and

chestnut around. Some big stuff, 10/10

Scale: 1 square =

to go.

After the Rain

TRANSECT C4:

- o on west side to start
- o some evening primrose
- o rolling top, perhaps grade and clay area
- o Borage and mustard on hill, dandelions and Russian thistle throughout
- o Gray rabbit at bottom of hill, few big brown squirrels, patch of green rabbit brush
- o dense stand of mustard, sewerline linear south

6/9/2022

Burrow 13 & 14: 8:05 AM

Two adjacent burrows in a small valley on small hillside. Little ground, mostly not used in long time. Long burrow has some debris in it of seeds. Russian thistle, borage, and chest around.

13 = 9 in. wide opening

14 = 12 in. wide opening

Scale: 1 square =

- o Some rush skeleton weed
- o Bark into disturbed ground, weeds, etc

TRANSECT C5 8:30 am

- o Unmarked?
- o 10 ft sparrow on fence (east side)
- o sparsely degraded, severely disturbed
- o Chest and lupine
- o large dirt mounds and trash pile
- o flushed small white tail rabbit
- o Some rolling tops
- o start hill, lots of chest, mustard

Burrow 15 and 16: @ 8:43 AM 6/9/22

In disturbed hillside. Both very large. Little mound, not water. Deep. looks expensive. Surrounded by

Burrow #15 is 18 in. wide base

Burrow #16 is 11 in. wide base

Large spider eggs in 15.

Mustard and mustard, some dry Russian thistle.

Scale: 1 square =

Notes on Burrow

0 New middle stake, sparse veg
with chest, medium size grass,
Kuhnia some rush skeletal
↑
mangled or burning with

lot of soil crust on top of hill,
helps w/ soil erosion has formed
mat on surface

0 2 last spores on debris pile

NE Parcel

TRANSECT NE1 (start from south)

9.45 am - 4h west side of trans

0 large prickly pear.

0 Chest grass, pea bushes, borage,
some mustard

• low gas throughout

0 some unspaced

0 med mow-sick will

0 Bugged will, patch of weeping

sagebrush - large stalks

0 Poor bushes and ferns throughout

0 lots of cricket, seems grass

0 Groundcover low, ~~gopher~~ ~~tail~~
~~scat~~ ~~tails~~

Scale: 1 square =

0 Some weeds, small and few
and borage
0 lot of tall ridge mustard
0 will deer flushed on trail, small
RUBB w/ no red ba trail,
'juvenile?
0 lots of weeping (hardwood) near
low water area
0 Soil crust
0 Low portion of soil from center
ward to grass

TRANSECT NE2:

0 More low grazed grasses and
low borage, turnips mustard

0 400 Chest grass integrated throughout

0 Brewer's black bird X2

0 some prickly pear, another prickly pear

0 Coyote felt but shotgun shells

0 rabbit brush gray, dusty soil w/
grazed grass and tile

0 some birdseed patches

0 weather prickly pear on gentle slope
within soil crust area

0 W. meadow hawk

Scale: 1 square =

Notes on Run

◦ cheat, rabbit, forbs
and

◦ cheat parcel is most important
to develop

TRANSACT NE3 12:40 PM

◦ Bulwer's and Gray rabbit
cheat and forbs 6-12 in tall
◦ white crust between

◦ some alfalfa and yarrou
◦ lots of cheat, some borage
and mustard

◦ pea - radicia lots
throughout mostly NE transects

◦ expansive shrub steppe habitat
w/ Columbia big and rough
with many - sparse grass and
forb cover, lots of white crust

◦ Western meadowlark

Carbon observed overwind
on NE parcel. Plucking
raptor (hawk/eagle?)

Scale: 1 square =

TRANSACT NE4

◦ Same as NE3 but opp

direction, some Rowley's pigeon
◦ hawk sparrow nest w/ 9 eggs!

◦ hawk sparrow 23 flushed from
nest

◦ Crows and rabbit towards south
and sage / forb @ north?

◦ opens up towards hill, cheat
and pea

◦ near south end, some rich shrubland
w/ yellow (???)

◦ Wyoming sagebrush patch near
end, peas

@ 2:01 PM, 6/9/2022
blw NE4 and 5

Burrow #17
large mound very deep hole. Debris
around opening, No signs of
animal feces, 21" high

21" deep, 7" high

TRANSACT NE5 2:00 PM
from south side

◦ green rabbit brush (sage), cheat, w/ 5%
buckwheat

◦ pea and cheat, borage gray
rabbit brush as approach to hill

Scale: 1 square =

Est. in 2022

o last sparrow x3 near midpoint
lots of young sage and
gray rabbit, groundcover of
chick and plantago, some
mustards
o plantago pots garden
o more whiting at end, mustard,
chest

Baron #1 @ 2:43 PM 6/9/2022
long sand apron. horizontal opening
14 inches wide @ opening, 6-7 in.
tall. V-shaped @ opening, lots
of feathers and animal remains.
small original skull. Pellets
and scat.

N Parcel
Transsect N1 @ 4:05 PM
o chest, pea, Datura, green
and gray rabbit push
o 60/40 gray: green rabbit
o started from west
o lot of chest and pea
o more gray rabbit further down

Scale: 1 square =

Dune mustard
o prickly pear very small flowering
near PINE fence
o Red 5 ft from middle @ 7:30 am
6/9/2022
o chest, mustard, rabbit.
o green rabbit space
o into rolling pea and chest hills
o some dead prickly pear

Weather cloudy, light rain,
temp. approx. 66°F
o 1x last sparrow on PINE fence
o Near east end, gray rabbit tracks,
chest with some mustard
o 10x bulbosa

TRANSSECT A12 7:50 AM
o from east side
o chest and pea, pea bulbosa
o lots of mounds w/ beetles
o few mustard and borage
o small patch of green rabbit
o more mounds in patches mostly
o open landscape
o some plantago pots garden in open
area

Scale: 1 square =

Red in the Rain

- Small patch of prickly pear
- lots of small borage near green rabbit
- low mix short plants - parcel grazed
- large hole found, looks like cow
- medium mix of green and gray rabbit
- some physalis (purple borage), also some with a 9. The common yellow
- Some more short
- lots of green rabbit
- few evening primrose
- some sand w/ small holes
- rolling top, some very sandy spots

TRANSECT N3 @ 8:19 am

- short, rabbit grazing some mustard
- from west side
- planning a potting area near street
- from balcony
- small patch of mountain dandelion
- more plantago
- shorter high throughout parcel, sparse

- Expansive mix of green and gray rabbit. 60:40 green:gray
- near middle, ~~some~~ pea among
- cheat, less rabbit all gray
- borage and some throughout trans
- open up, grazed
- with stake @ 8:36
- lots of pea (transsect?)
- open pea cheat mix
- large sandy pit in middle, lots of topsoil around

TRANSECT N4 @ 9:51 am

- full cheat, borage, weed and thread on other side of cattle fence
- start from east side
- cheat and bedstraw, all else grazed short, open
- topo relief, narrow hill smooth extends into last parcel
- open creek soil patches w/ borage
- lots of cow pies near open grazed
- Pea bulbosa area
- into lots of small gray rabbit brush
- very few needle and thread plantago
- along west side... lots of heavy

o plucked by ~~but~~ sparrow (AP)
w. meadow lark

o small starts with, some
meadow

o some green rabbit among grey
lots of grey in fens, mostly grey
toward end

o some white over mix green/grey
over very end here
o double-crested in flight overhead
cowbird

o large open crusty area
o plowage

TRANSLIT N5 @ 9:57 am

o start from west side

o local velvet at beginning

o many quagga chills

o chert and lichen

o some fish skeleton wood

o most green and grey velvet

o lots of chert and sp. buller's

o cow feet
lots

o plowage

o slope of green velvet

o scattered large animal bones

Scale: 1 square =

o ~~Worms~~ among rabbit, crabs

o starts with in open areas

o medium prickly pear on transect

o lichen and purple borage along

small mounds, sandy mounds with

beetles

o open areas, mostly barren and

grazed in some small rabbit patch,

plowage

o potentially grazed needle and

thorn

o One lone desert parsley

o generally open, gently sloped,

chert grass

Scale: 1 square =

Not in the field

PSC PWRF Improvements Project

RH2 Biological Survey Burrows Summary

17 BURROWS TOTAL on 4 parcels

South USBR Parcel – 8 burrows

Summary

South USBR Parcel

- Burrows #2 and 9 are potentially suitable burrowing owl habitat.
- Burrows #3, 4, 5, and 6 appear to have been created by coyotes.
- Burrows #2, 7, 8, and 9 were potentially created by badgers.

Individual Burrows

Transect S-2: 5 burrows observed

- Burrow #2: 6/8/2022 @ 10:56 AM



Signs of animal activity / predation around burrow entrance. Tufts of fur, small white scat. Some matted rye grass inside the burrow. Sandy soil mound in front of opening. 13-inch-wide opening. Some fur and long, narrow scat found nearby.

- Burrow #3: 6/8/2022 @ 11:23 AM



Less of a soil mound near opening. No signs of animal activity. 11-inch-wide opening. Dense, overgrown rye grass surrounds burrow. Likely been abandoned for a while.

- Burrow #4: 6/8/2022 @ 11:32 AM



Just north of burrow #3. Wide opening with small mound in soil mound in front. Gray rabbitbrush near opening. No signs of animal activity. In overgrown rye grass area.

- Burrow #5: 6/8/2022 @ 11:38 AM



Very large entrance with remnant opening on other side (likely caved in). Piece of Styrofoam in entrance. Large sandy soil mound in front of the burrow. No signs of animal activity.

- Burrow #6: 6/8/2022 @ 11:57 AM



Burrow is a tunnel with an opening on both sides. Large sand mound in front of the main entrance. 10 inches wide at the base. Near a patch of Columbia big basin sagebrush.

Transect S-3: 2 burrows

- Burrow #7: 6/8/2022 @ 1:44 PM



Entrance is 10 inches wide. Burrow is dug out at an angle. Large exposed sand mound near opening. No signs of animal activity. Is near a patch of Columbia big basin sagebrush and NE of the overhead power lines.

- Burrow #8: 6/8/2022 @ 1:59 PM



Entrance is 9 inches wide. No signs of animal activity. Near Columbia big basin sagebrush patch.

Transect S-4: 1 burrow

- Burrow #9: 6/8/2022 @ 2:55 PM



Small sand mound at opening. Entrance is round. Surrounding area has good visibility, consists of low growing cheatgrass. 9.5-inch-wide, 7-inch-tall opening.

City of Pasco**Process Water Reuse Facility – Phase 2****Wildlife and Vegetation Surveys****Burrow Summary****City Parcel – 7 burrows****Summary****City Parcel**

- Burrows #10, 11, and 12 are potentially suitable burrowing owl habitat.
- Burrows #13, 14, 15, and 16 appear to have been created by coyotes.
- Burrows #10, 11, and 12 were potentially created by badgers.

Individual Transects**Transect C-3: 3 burrows**

- Burrow #10: 6/9/2022 @ 7:52 AM



Several remnant, connecting burrows in immediate area. Largest opening has small sand mound in front of opening. Large beetle roaming near entrance. Entrance is 7-inch-wide, 7-inch-tall. No other signs of wildlife. Adjacent to patch of Columbia big basin sagebrush. Surrounding area is low cheatgrass, good horizontal visibility.

- Burrow #11: 6/9/2022 @ 7:41 AM



Burrow #11 is very close to burrows #10 and #12. Part of the network of burrows in area, some appear long abandoned. Some large rocks in the area. Possible that movement of soil was done recently. 8-inch-wide opening.

- Burrow #12: 6/9/2022 @ 7:42 AM



9-inch-wide opening to burrow. Lots of tumble mustard and cheatgrass surrounding burrow. Some Columbia big basin sagebrush in the immediate area also. Rolling, gently hilly topography nearby.

Transect C-4: 2 burrows

- Burrow #13: 6/9/2022 @ 8:05 AM



Burrow #13 is adjacent to burrow #14. Burrows are between two small hills, like a miniature valley. Burrows are dug out into the hillside. Small sandy mounds in front of both burrows. Entrances are overgrown, do not appear to have been used in a long time. Interior of burrows appear to have backfilled a little bit with sand/cave in. Russian thistle, borages, and cheatgrass make up surrounding area. 9-inch-wide opening.

- Burrow #14: 6/9/2022 @ 8:05 AM



Same general description as burrow #13. Slightly larger, 12-inch-wide opening.

Transect C-5: 2 burrows

- Burrow #15: 6/9/2022 @ 8:43 AM



Burrow is dug out into hillside. Highly disturbed area surrounding area. Adjacent to burrow #16. Small mound in front of the entrance. Interior of burrow appears deep, expansive. Surrounding vegetation is cheatgrass, tumble mustard, dead Russian thistle. 18-inch-wide opening.

- Burrow #16: 6/9/2022 @ 8:43 AM



Same general description as burrow #15. 11-inch-wide entrance to burrow.

NE USBR Parcel – 2 burrows

Summary

NE USBR Parcel

- Burrows #1 and 17 are potentially suitable burrowing owl habitat.
- Burrows #1 and 17 were potentially created by badgers.

Individual Transects

Transect NE-4: 1 burrow

- Burrow #17: 6/9/2022 @ 2:01 PM



Large mound in front of burrow. Entrance is small, very round. Debris (Russian thistle) around opening. No signs of animal activity/use. 9.5-inch-wide, 7-inch-tall opening. Measured depth inside at about 2'8" to the presumed back of the burrow. Burrow found between transects 4 and 5 of parcel.

Transect NE-5: 1 burrow

- Burrow #1: 6/9/2022 @ 2:43 PM



Expansive, open, sandy mound in front of the burrow entrance. Entrance is within a lateral v-shape in the surface. Entrance is very low and wide. 14-inch-wide, 7-inch-tall opening. Lots of presumed burrowing owl adult and juvenile feathers found nearby burrow, in sandy area. Two small clumps of either molt or juvenile feathers found. Pellets with animal remains, and small rodent skull found nearby. Owl adults and/or juveniles potentially predated upon by coyote, or badger?

Appendix C

Site Photographs



East side of the south parcel facing northwest towards PWRF irrigation pump station. Dense stand of cereal rye.



Basin big sagebrush stand on the south parcel. Some rabbitbrush, forbs, and grasses interspersed throughout stand.



South parcel from beneath the Bonneville Power Authority overhead power lines. On the earthen road that bisects the parcel. Facing southeast.



View of open cheat grass and rabbitbrush vegetation along the overhead power line easement on the south parcel.



Access driveway on the south side of PWRF. Fencing of PWRF visible on the left. Eastern cottonwood tree visible in the distance. North side of the south parcel. Facing east.



Irrigation pump station building on the southeast side of the west half of the City parcel. Facing northeast.



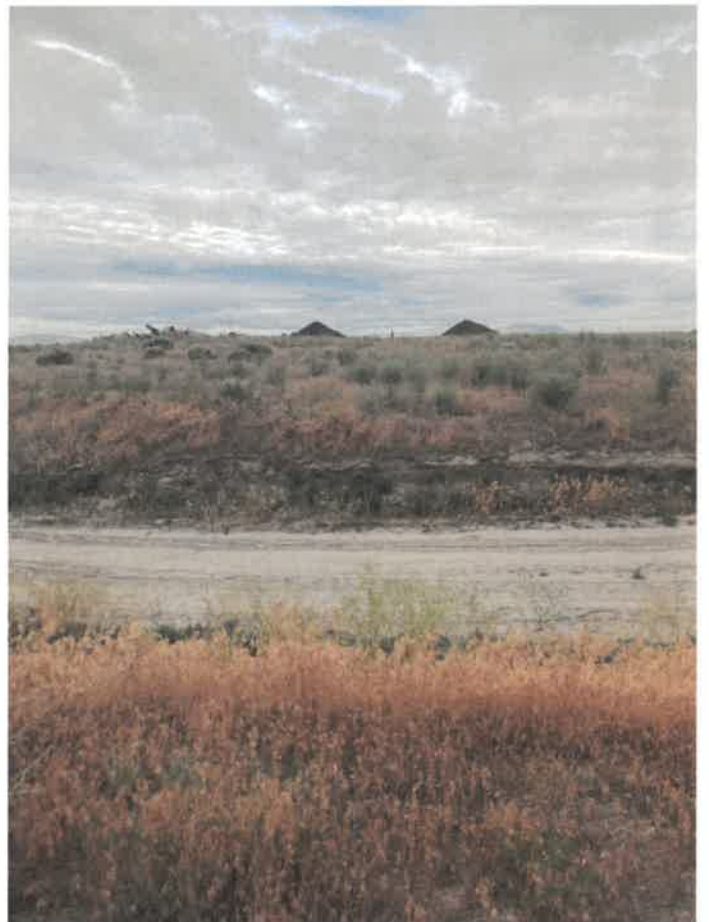
Disturbed soils on the City parcel with weedy vegetation and barren earth. Near center of the parcel facing west.



Southwest side of the City parcel facing northwest along the overhead power line easement. Cattle grazing in the distance.



Dense stand of tumble mustard on a previously disturbed part of the City parcel. Facing southeast towards PWRF.



PWRF access driveway that bisects the parcel from southwest to northeast. Mounds of excavated material and waste visible in the distance on the north side of the parcel. Facing west.



Expansive mixed green rabbitbrush and common rabbitbrush stands on the north parcel.



Cattle actively grazing near a mixed rabbitbrush stand on the north parcel.



Grazed forbs and grasses along a transect on the north parcel. Rolling topography visible in the distance.



Panorama view of the north parcel showing open section with some rolling hilly topography.



On the south side of the large hill on the northeast parcel. Facing south towards large stands of big sagebrush.



Hilly terrain on the north side of the northeast parcel. Large, continuous stands of big sagebrush in the distance.



Large Columbia prickly pear near the southwest side of the northeast parcel.



Beginning of a transect on the south side of the northeast parcel. Facing south towards croplands in the distance.



North side of the northeast parcel. Heavily grazed grass and forb ground cover. Facing the feedlots to the northwest.

Appendix D

WDFW Correspondence and Draft Mitigation Document

STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
HABITAT PROGRAM

DATE: Friday, July 15, 2022

MEMO

TO: Jon Padvorac, City of Pasco; Alicia Pettibone, RH2 Engineering

FROM: Michael Ritter

SUBJECT: **Pasco Wastewater Reuse Facility Expansion: Impacts and Mitigation**

On Friday July 1, Jason Fidorra, (Wildlife Biologist), Jon Padvorac, City of Pasco, and I, conducted a site visit of the proposed Pasco Wastewater Reuse Facility (PWRF). Prior to this a virtual meeting was held on June 29.

The PWRF process wastewater from the City's agricultural food processors is planned to be used for eventual irrigation of adjacent farmlands. Due to growing demand, the PWRF will be expanding, and the site visit was held to evaluate the use of wastewater on approximately 280 acres of adjacent lands. Parcels 2, 3, and 4 are U.S. Bureau of Reclamation lands, and Parcel 1 is City of Pasco (See figure 1 below). The City is in the process of acquiring the BOR lands for use as tertiary treatment of wastewater and to provide irrigated agriculture. This is a City of Pasco project in Franklin County jurisdiction, and Planners and Engineers from both agencies, as well as the consultant, are very interested in mitigation options.

Initial work would focus on Parcels 1 and 2 for the development of a new settling pond on Parcel 1 and a pond for winter water storage on Parcel 2. Parcel 3 may serve as a site for excavated materials. Parcel 4 is virtually surrounded by PWRF irrigated fields and will be converted to farmland. The development will result in complete permanent conversion of the entirety of parcels 1, 2, and 3, with only some unfarmed corners possibly remaining in parcel 4.

The PWRF expansion is expected to occur over the next 10+ years as piping and water delivery and the settling pond area are upgraded/installed and the parcels are converted to irrigated agriculture. Additionally, there is the likelihood that additional lands could be converted to irrigated agricultural, over time because of this expansion. These areas may also require mitigation if additional shrubsteppe is converted.

The consulting firm RH2 had already completed habitat mapping and wildlife surveys based partially on prior input and direction from WDFW. A pre-meeting was held on June 29, 2022, and the project was discussed in more detail, including mitigation. We provided a variety of mitigation scenarios, including monetary compensation, land and conservation easement acquisitions, and construction of artificial burrows.

The project recorded numerous inactive/old burrows (Burrowing owl) on the project site, and one that showed evidence of being active this year, located on the northeast parcel. As a side note, there are active natural and artificial Burrowing owl borrows immediately to the west of parcels 1 and 3.

The proposed expansion areas are all mapped a presumptive shrubsteppe (Habitat Program Web App) and the site visit confirmed that the northeast parcel (80 acres) is indeed shrub and steppe, with Wyoming big sage, Yarrow, Rabbitbrush, Prickly pear cactus, and bunchgrasses. This site also showed evidence of grazing.

The southern parcels are dominated by cheatgrass but did have pockets of Rabbitbrush, and in the southernmost parcel, a pocket of mature sagebrush. The parcel just north of the settling pond was being grazed. In total, the southern parcels have 5-10 acres that would be classified as shrubsteppe habitat, but this is made up of many isolated and small patches of mostly Rabbitbrush and a couple of patches of Sagebrush.

Based on the work conducted by RH2 and documents they prepared along with our site visit, there is enough information to assess habitat and wildlife impacts. Additionally, we had already discussed mitigation options with the project. Based on these factors, we do not see the need for the project to prepare a Critical Area Report.

Mitigation for the permanent loss of shrubsteppe habitat typically follows a 2:1 ratio, and in this case the habitat also supports a State Candidate species, Burrowing owl. So, overall 80 acres (northeast parcel) + 10 acres (southern parcels) = 90 acres impacted (@2:1) = 180 acres for mitigation.

Monetary mitigation: 180 acres x average dollars/acre of similar native habitat + 15% for indirect costs. Indirect costs are 15% of the average dollars/acre and partially cover administration costs for real estate transactions conducted by WDFW. The average per acre price is based on recent land sales of similar habitat in the general area. The total mitigation obligation could be achieved through equal annual payments over a period of 10 years.

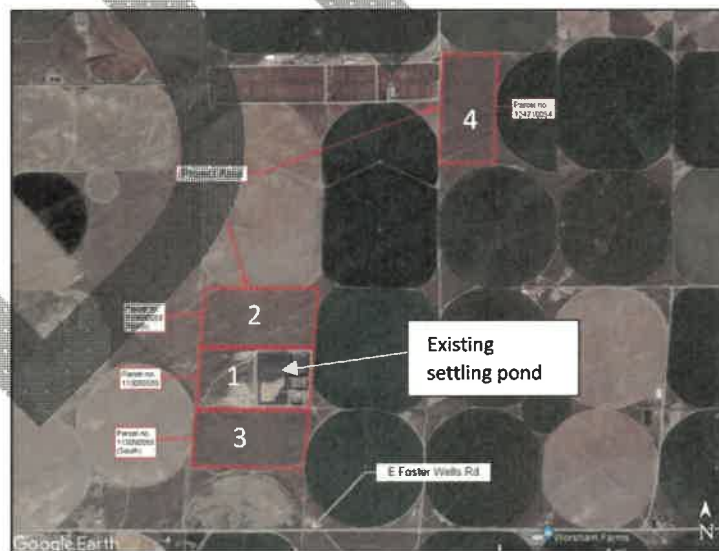


Figure 1. Pasco Wastewater Reuse Facility Expansion Map

Alicia Pettibone

From: Alicia Pettibone
Sent: Tuesday, June 28, 2022 12:46 PM
To: Fidorra, Jason C (DFW); Ritter, Michael W (DFW)
Cc: Noah Bloxton; Jenny Sandifer; Kyle Smith; Jon Padvorac
Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

Just sent a meeting request for tomorrow afternoon. WE can also do Thursday though if this proves not to work for everyone, so just let me know. And thank you both for the quick replies last week!



Alicia Pettibone | RH2 Engineering, Inc.

O: 425.951.5436

C: 425.466.6727

From: Fidorra, Jason C (DFW) <Jason.Fidorra@dfw.wa.gov>
Sent: Wednesday, June 22, 2022 9:47 AM
To: Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>; Alicia Pettibone <apettibone@rh2.com>
Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>; Jon Padvorac <padvoracj@pasco-wa.gov>
Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

Afternoons best for me also next week: Tues, Wed, Thurs work for me.
Jason

From: Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>
Sent: Wednesday, June 22, 2022 7:23 AM
To: Alicia Pettibone <apettibone@rh2.com>; Fidorra, Jason C (DFW) <Jason.Fidorra@dfw.wa.gov>
Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>; Jon Padvorac <padvoracj@pasco-wa.gov>
Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

Great info! I am available in the afternoons (12-4) next week with some availability in the mornings

Mike

From: Alicia Pettibone <apettibone@rh2.com>
Sent: Friday, June 17, 2022 4:03 PM
To: Fidorra, Jason C (DFW) <Jason.Fidorra@dfw.wa.gov>; Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>
Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>; Jon Padvorac <padvoracj@pasco-wa.gov>
Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

External Email

Hello Jason and Mike,

Greetings! Wanted to update you on our field surveys from last week, which we finished up for the 4 parcels last week. The south and northeast parcels contain some pockets of moderate sagebrush-steppe habitat with Columbia big basin and Wyoming big sagebrush dominants. The City's parcel and to a greater extent, the north parcel were disturbed vegetatively and did not predominantly support sagebrush-steppe areas. We did not find any milkweeds or Monarchs, nor ground squirrel evidence. We did see several bird species, including the curlew's. We discovered a total of 17 burrows, although none were observed with active owl or wildlife species. Attached are our field maps and a photographic summary of the burrows encountered. Below is a quick summary of burrows per parcel:

South parcel: 8 burrows

City parcel: 7 burrows

NE parcel: 2 burrows, one that is confirmed owl habitat (remains of owls that were a victim of predation were found near the burrow)

North parcel: 0 burrows

It would be helpful to discuss (possibly meet virtually or via telephone) our findings, the potential for mitigation with land conversion from the project activities, and better flesh-out what WDFW will expect for this project. Would it be possible to do so the week of the 26th? I am out of the office next week, but wanted to see if we could arrange for the week following.

Thanks much and have a great weekend,



Alicia Pettibone | RH2 Engineering, Inc.

O: 425.951.5436

C: 425.466.6727

From: Alicia Pettibone

Sent: Monday, June 6, 2022 10:39 AM

To: Fidorra, Jason C (DFW) <Jason.Fidorra@dfw.wa.gov>

Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>; Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>; Jon Padvorac <padvoracj@pasco-wa.gov>

Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

Hi Jason,

Appreciate the feedback and additional information on wildlife to be aware of during our investigations this week. I will be in touch with you and Mike following that work.

Have a great week,



Alicia Pettibone | RH2 Engineering, Inc.

O: 425.951.5436

C: 425.466.6727

From: Fidorra, Jason C (DFW) <Jason.Fidorra@dfw.wa.gov>

Sent: Friday, June 3, 2022 3:06 PM

To: Alicia Pettibone <apettibone@rh2.com>; Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>

Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>

Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

I forgot to mention that Columbia Basin Spadefoot are also present in this area, possibly Tiger Salamanders as well! I often find the toads when working with the Burrowing Owl burrows.

Jason

From: Fidorra, Jason C (DFW)

Sent: Friday, June 3, 2022 2:48 PM

To: Alicia Pettibone <apettibone@rh2.com>; Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>

Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>

Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

Hi Alicia,

Burrowing Owls are currently present in the vicinity and likely occur on existing and proposed city parcels at this project site. Shrubsteppe habitat present in these sites in at least moderate quality from my memory.

Monarchs, shrubsteppe obligate birds, and Ground squirrels might be possible... Mike provided good info overall. I would like to be involved in discussions of mitigation concepts and ideas.

Jason

Jason Fidorra

District 4 Wildlife Biologist – Benton and Franklin Counties

Washington Dept. of Fish & Wildlife

2620 N. Commercial Ave.

Pasco, WA 99301

Office: 509-545-2201

Cell: 509-492-6987

he/him

From: Alicia Pettibone <apettibone@rh2.com>

Sent: Thursday, June 2, 2022 9:27 AM

To: Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>; Fidorra, Jason C (DFW) <Jason.Fidorra@dfw.wa.gov>

Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>

Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

External Email

Thank you, Mike! This is very helpful. We were out last week doing a preliminary survey and will be doing more formal ones next week, so this info is very helpful. I will look over this in a little more detail later today and reply, but do appreciate this assistance.

Best,



Alicia Pettibone | RH2 Engineering, Inc.

O: 425.951.5436

C: 425.466.6727

From: Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>

Sent: Thursday, June 2, 2022 8:42 AM

To: Alicia Pettibone <apettibone@rh2.com>; Fidorra, Jason C (DFW) <Jason.Fidorra@dfw.wa.gov>

Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>

Subject: FW: Pasco Process Water Reuse Facility Winter Storage Improvements

Alicia, I hope the following is useful. I have include WDFW wildlife biologist Jason Fidorra and he may have additional surveys recommendations and input.

Surveys are planned to utilize a linear transect approach. Based on coordination with Ecology and USBR, our current understanding is the following wildlife may be present or have suitable habitat existing within the project area: Since the areas are small and good survey coverage can be achieved, I would suggest surveys/transects similar to what we recommend for solar project.

The survey method should include the entire project site and walking transects of ~60 meters apart during good weather conditions (low-moderate wind and little-no rain). Certain times of day may be preferable for locating animals moving to and from food and water sources. All PHS species locations should be recorded (GPS). A comprehensive wildlife list should also be kept of all species seen. If species are identifiable via scat or tracks, they should also be noted.

- Burrowing Owl (*Athene cunicularia*); In the past, these were much more abundant and common in "vacant" corners of center pivot irrigated circles adjacent and nearby the project area and may presently occur in the project area.
- Greater Sage-Grouse (*Centrocercus urophasianus*); Does not occur in this area so no surveys required
- Washington ground squirrel (*Urocitellus washingtoni*); and
- Monarch Butterfly (*Danaus plexippus*). These are associated with milkweed which is known to occur in areas where sufficient soil moisture occurs such as edges of fields that are irrigated. The project area is adjacent to several irrigated fields.

I will also mention that long-billed curlew might use the project area and depending on the condition of shrubsteppe habitat, sage sparrows and sage thrashers might also be present.

Do you have additional information on these sites, documented species presence, available habitat, usage, timing, or historic information regarding any of these species in the area?

I would recommend accessing our public Priority Habitats and Species (PHS) web page <https://geodataservices.wdfw.wa.gov/hp/phs/> where you will note that the project area is identified as shrubsteppe habitat, ground squirrels, etc. While the data also note sage grouse, they do not occur in this area. You will also note burrowing owls site(s) nearby

USFWS lists the following endangered and threatened species as potentially present in the County:

- Columbia Basin pygmy rabbit (*Brachylagus idahoensis*) Does not occur in this area so no surveys required
- Gray wolf (*Canis lupus*) Does not occur in this area so no surveys required
- Yellow-billed Cuckoo (*Coccyzus americanus*) Does not occur in this area so no surveys required
- Bull trout (*Salvelinus confluentus*) Does not occur in this area so no surveys required
- White bluffs bladderpod (*Physaria douglasii ssp.*) Does not occur in this area so no surveys required
- Monarch butterfly

Critical habitat has not been designated for any of these species in the project vicinity. Does WDFW have any documented presence of these species or know of suitable habitat within or near the project vicinity?

Are there any other species or habitat we should incorporate into our study? No

Additionally, I'm interested if you have any thoughts on suitable mitigation if we do have presence of and/or suitable habitat for those four species of interest?

This is a city of Pasco Project and WDFW's role is to provide recommendations to the city that are consistent with its code language regarding critical areas and species. I would need to review specific sections of the code to answer questions about avoid, minimize, and mitigate. We have worked closely with the city on a variety of projects over the years that achieved both development and mitigation.

From: Alicia Pettibone <apettibone@rh2.com>
Sent: Wednesday, June 1, 2022 2:12 PM
To: Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>
Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>
Subject: RE: Pasco Process Water Reuse Facility Winter Storage Improvements

External Email

Hi Mike, Just following up on this to see if you can provide some input? Thanks much,



Alicia Pettibone | RH2 Engineering, Inc.

O: 425.951.5436

C: 425.466.6727

From: Alicia Pettibone
Sent: Tuesday, May 17, 2022 2:17 PM
To: Ritter, Michael W (DFW) <Michael.Ritter@dfw.wa.gov>
Cc: Noah Bloxton <nbloxton@rh2.com>; Jenny Sandifer <jsandifer@rh2.com>; Kyle Smith <ksmith@rh2.com>
Subject: Pasco Process Water Reuse Facility Winter Storage Improvements

Hi Mike,

Hope all is well with you! On the heels of submitting the Richland Center Parkway project, we've another project with Pasco that I'd love your input on. Pasco is planning expansion of their Process Water Reuse Facility (PWRF), which is presently situated on City-owned parcel no. 113090085.

RH2 is helping with design and permitting for the project which proposes to make improvements to and increase the wastewater storage capacity of the PWRF by approximately 600 million gallons (MG). The expansion is aimed at accommodating process wastewater from the City's agricultural food processors, including Pasco Processing, Twin City Foods, Reser's, Freezepak, Simplot, Grimmway, Lamb Weston, and Darigold. Presently, the ~160 MG storage capacity of the PWRF is being used to partially accommodate process wastewater from the first 5 user's in that list. Anticipated increased flows from those user's, as well as flows from the latter three in that list, are driving the need for these improvements.

Improvements at the facility include the addition of winter storage basins, construction of wastewater treatment facilities, as well as grading/process piping improvements. The City is presently coordinating with USBR for purchase of 240 acres on parcel nos. 113090058 and 124710054 to accommodate storage capacity demands. The attached

ProjectArea_Figure is an overview of the parcels of interest and the two *Conceptual Site Plans* depicting two alternative layouts being considered for PWRF improvements. Acquisition of the USBR parcels will require compliance with NEPA and we are working on preparation of an EA for that purpose. The project has also received Clean Water SRF funds from Ecology and Public Works Board monies; CWSRF also requires a modified NEPA compliance.

Our team is planning to conduct biological surveys of the USBR and undeveloped City parcel (west side of parcel no. 113090085) in the near future. Surveys are planned to utilize a linear transect approach. Based on coordination with Ecology and USBR, our current understanding is the following wildlife may be present or have suitable habitat existing within the project area:

- Burrowing Owl (*Athene cunicularia*);
- Greater Sage-Grouse (*Centrocercus urophasianus*);
- Washington ground squirrel (*Uroditellus washingtoni*); and
- Monarch Butterfly (*Danaus plexippus*).

Do you have additional information on these sites, documented species presence, available habitat, usage, timing, or historic information regarding any of these species in the area?

USFWS lists the following endangered and threatened species as potentially present in the County:

- Columbia Basin pygmy rabbit (*Brachylagus idahoensis*)
- Gray wolf (*Canis lupus*)
- Yellow-billed Cuckoo (*Coccyzus americanus*)
- Bull trout (*Salvelinus confluentus*)
- White bluffs bladderpod (*Physaria douglasii ssp.*)
- Monarch butterfly

Critical habitat has not been designated for any of these species in the project vicinity. Does WDFW have any documented presence of these species or know of suitable habitat within or near the project vicinity?

Are there any other species or habitat we should incorporate into our study? Any guidance you can provide would be very helpful in our understanding of the existing conditions and how we can frame our survey to address any habitat or species concerns and/or potential impacts. Additionally, I'm interested if you have any thoughts on suitable mitigation if we do have presence of and/or suitable habitat for those four species of interest?

Appreciate your input and feel free to call or let me know when we could discuss if that is easier for you. Thanks much,



Alicia Pettibone | RH2 Engineering, Inc.

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Agenda Item #1

MAPS & SITE PHOTOS

CUP 2022-10

RH2 Engineering, Inc. – Process Water Reuse Facility

Figure 1. Project Area Parcels Map

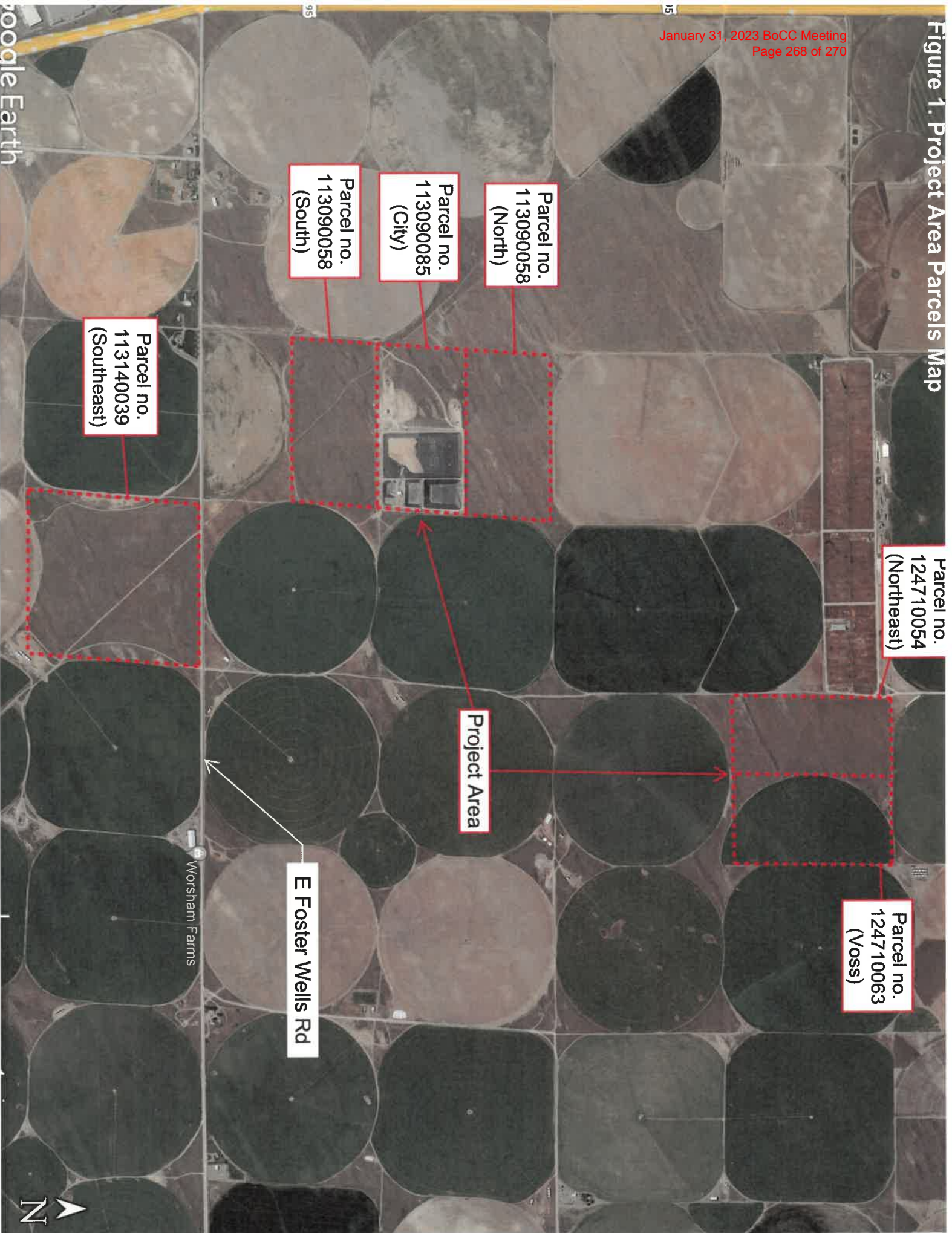
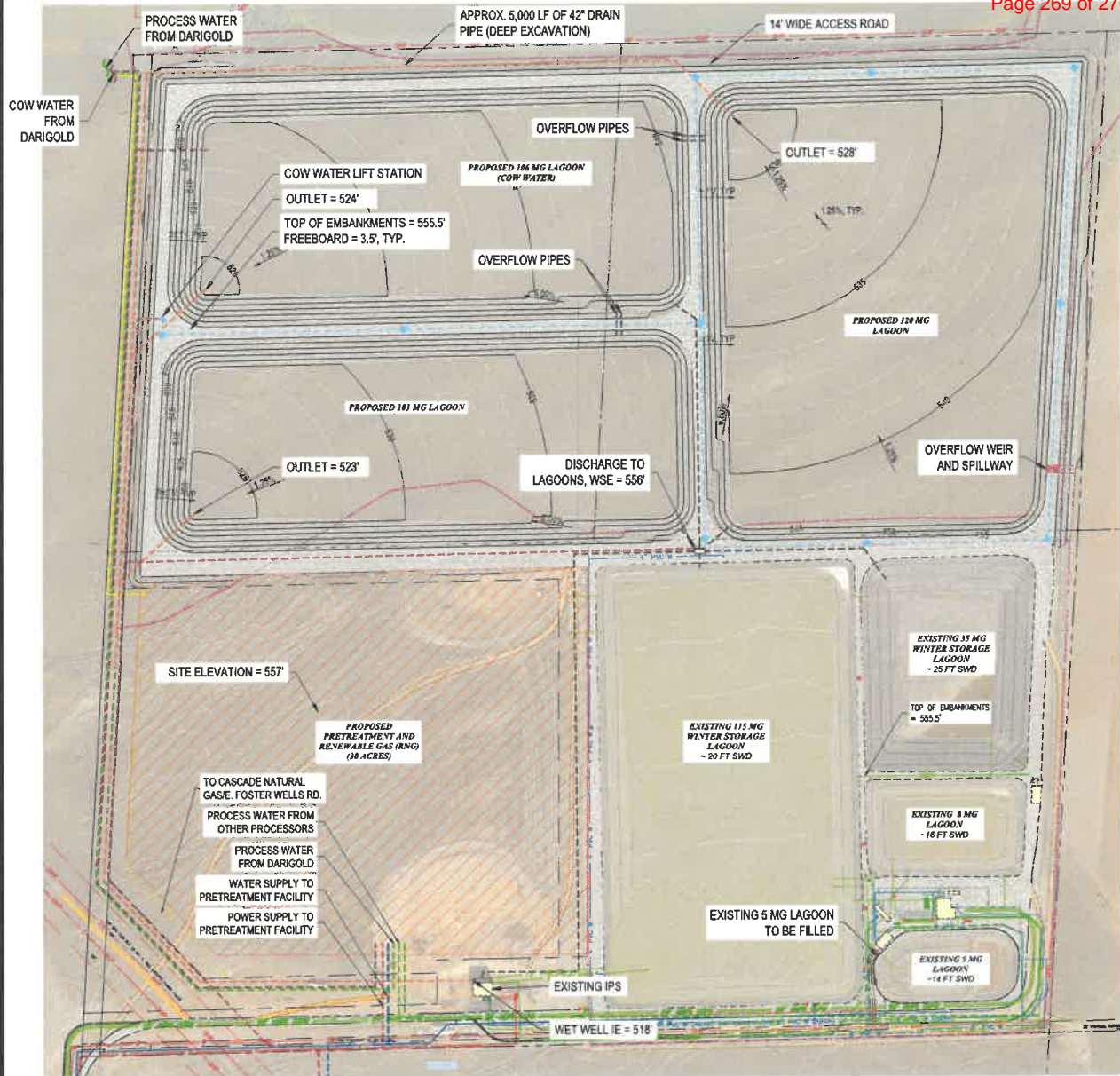


Figure 2. PWRF Improvements Conceptual Proposed Site Plan (Phases 2 and 3)

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CONCEPTUAL SITE PLAN - PHASE 2

LAGOON STORAGE

Lagoon	Winter Storage (MG)
PROPOSED 128 MG LAGOON	126
PROPOSED 181 MG LAGOON	183
PROPOSED 120 MG LAGOON	120
Total	329

EARTHWORK

Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	1,430,100	637,900	792,200 CUT

LEGEND

	PROCESS WASTEWATER
	COW WATER FORCE MAIN
	TREATED WASTEWATER (TO LAGOONS/IPS)
	GRAVITY DRAINS (TO IPS)
	TREATED WASTEWATER FORCE MAIN (FROM LAGOONS)
	POWER LINE
	NATURAL GAS LINE
	WATER LINE

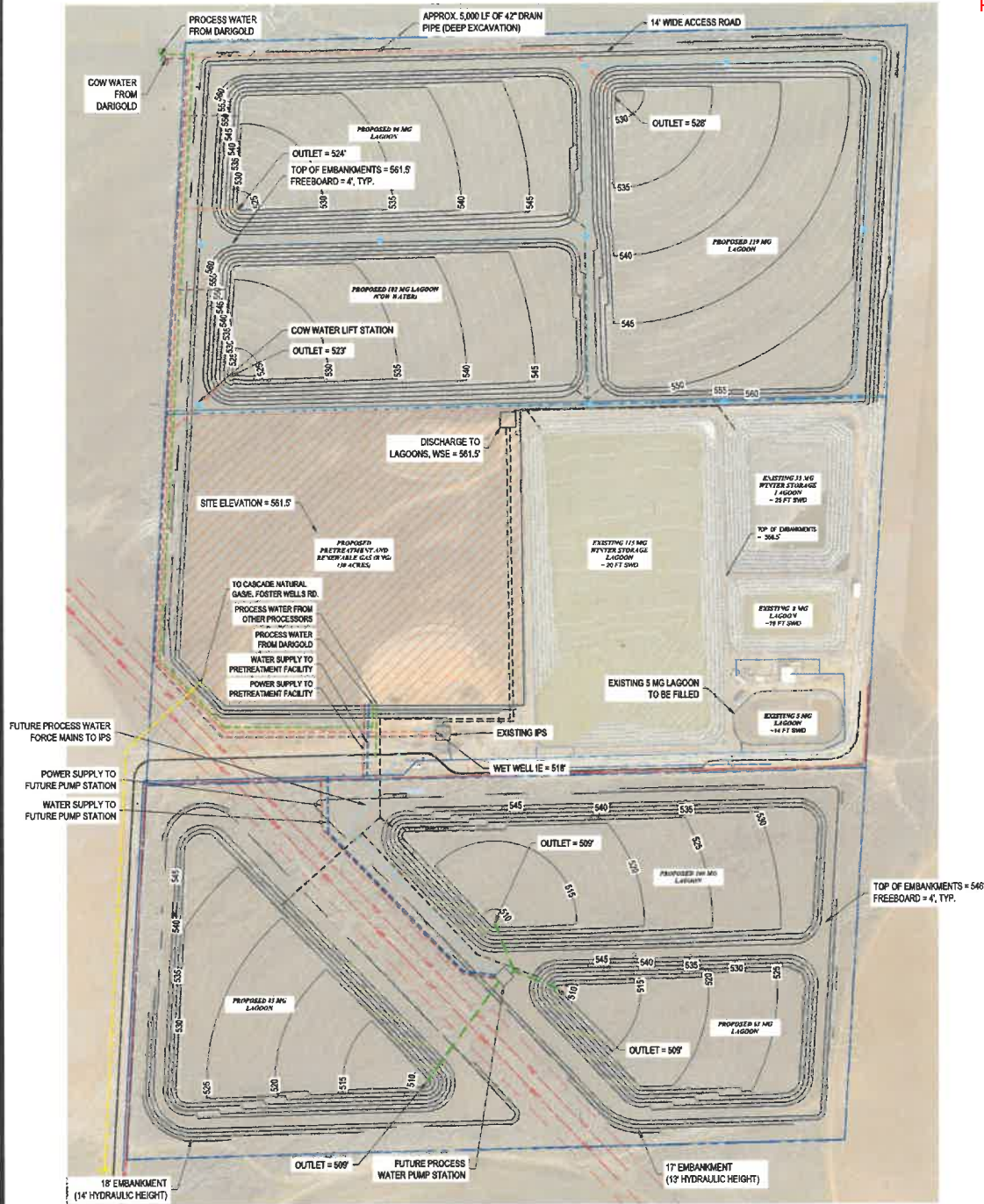
CONCEPTUAL SITE LAYOUT

PROCESS WATER REUSE FACILITY



Figure 3. PWRF Improvements Conceptual Proposed Site Plan (Phases 2, 3 and Future Expansion)

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PROPOSED SITE PLAN

LAGOON STORAGE (PHASE 2)

Lagoon	Winter Storage (MG)
PROPOSED 96 MG LAGOON	96
PROPOSED 102 MG LAGOON (COW WATER)	102
PROPOSED 119 MG LAGOON	119
Total	317

LAGOON STORAGE (FUTURE)

Lagoon	Winter Storage (MG)
PROPOSED 85 MG LAGOON	85
PROPOSED 100 MG LAGOON	100
PROPOSED 83 MG LAGOON	83
Total	268

EARTHWORK (PHASE 2)

Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	900,000	1,040,600	140,600 FILL

EARTHWORK (FUTURE)

Proposed Earthwork Quantities	Cut (cu. Yd)	Fill (cu. Yd)	Net (cu. Yd)
Total	997,400	209,600	787,800 CUT

LEGEND

---	PROCESS WASTEWATER
---	COW WATER FORCE MAIN
---	TREATED WASTEWATER (TO LAGOONS/IPS)
---	GRAVITY DRAINS (TO IPS)
---	TREATED WASTEWATER FORCE MAIN (FROM LAGOONS)
---	POWER LINE
---	NATURAL GAS LINE
---	WATER LINE

CONCEPTUAL SITE LAYOUT

PASCO PROCESS WATER REUSE FACILITY

