

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist: Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants: This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies: Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND

1. Name of proposed project, if applicable: **Goose Gap/Red Mountain Complex**
2. Name of applicant: **The Washington State Department of Natural Resources (DNR)**
3. Address and phone number of applicant and contact person: **713 Bowers Rd, Ellensburg WA 98926. Contact Randy Niessner at 509-925-0941**
4. Date checklist prepared: **September 3, 2015**
5. Agency requesting checklist: **The Washington State Department of Natural Resources**
6. Proposed timing or schedule (including phasing, if applicable): **The spring of the year 2016 or later.**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. **Future additions may occur however no specific information regarding the further expansions is known at this time. DNR intends future additional developments, within the project area, and future SEPA's or Addendums will be completed where SEPA's have not been previously conducted.**

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

- **DNR has completed numerous SEPA's outlining this project area through sequential developments which began in 1992. The project area is described below in #11.**
- **In addition, previous approvals from the Washington State Department of Ecology have been completed, and applications are pending which would allow DNR to further spread its water rights (applications listed below in #10) over the lands identified below in #11. These lands are shown on Exhibit B.**

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. **No**

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

- **Kennewick Irrigation District (KID) water service contract to use district water.**
- **Easements/roads including approaches within the project area (and other access roads from adjoining properties) may require authorization from Benton County/WSDOT**
- **Five water right change applications have been submitted to Washington State Department of Ecology including: Change application nos. CG4-28833P@4, CG4-30827P@1, CG4-23968C@3, CG4-23969C@3, and CG4-23977C@2**

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. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) **The proposal is to continue converting lands from historical grazing and dispersed ORV use to irrigated agriculture and includes the following:**

- **Water rights changes (shown on Exhibit B) to add additional acres of land to be used for irrigation;**
- **Issue new leases allowing for the development of up to 500 acres as shown on Exhibit C. DNR intends to conduct Public Auctions and issue leases allowing irrigation of the parcels, as described in #12 below. Some road construction, issuance of easements for development of new roads, attain access easements or other agreements to said lands across private property if needed, trenching for pipelines, and installation of irrigation equipment, power connections, plus some small construction projects for storage buildings are anticipated. These areas of development are shown, outlined in purple, on Exhibit C.**

The Goose Gap/Red Mountain development project began in 1992. Through efforts which included

spreading water, the development of irrigated lands, and the acquisition of additional properties surrounding the project area, DNR now has an area where it can irrigate approximately 3,260 acres of lands within the entire project area described in Exhibit B. Within the project area, there are currently approximately 2,768.7 acres being irrigated.

Water rights:

Within the project area shown on Exhibit B, for water supply DNR will rely on its existing Goose Gap/ Red Mountain (GGRM) groundwater rights portfolio and will continue with its long term plan of crop conversions and vineyard/orchard development. DNR’s previous GGRM water right changes spread existing rights by removing higher duty crops and planting new vineyards with the water savings. The current phase of the project, to lease and develop an additional 500 acres, continues this long term plan with the water right change applications listed above. Specifically, applications include changes to place of use and conversions from alfalfa to wine grapes with an associated increase in irrigated acres limited by annual consumptive quantity (“spreading”). The applications also include proposals that are part of a broader effort to ensure that DNR is in compliance with its water rights. The attached map (Exhibit B) provides an overview of the water rights and change proposals, and details are included in the applications submitted to Department of Ecology. In addition to the groundwater rights, DNR plans to use Kennewick Irrigation District surface water to irrigate 220 acres of the 500 acre project.

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. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

- South ½ Section 10, Township 9 North, Range 27 East, south of Hwy 224, 80 acres.
- N ¾ Section 14, Township 9 North, Range 27 East, north of I-82, 260 acres (KID water in part).
- NE ¼ Section 20, Township 9 North, Range 27 East, south of I-82, 60 acres.
- NE ¼ Section 24, Township 9 North, Range 27 East, north of I-82, 60 acres, KID water (all).

B. ENVIRONMENTAL ELEMENTS

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)? **See Exhibit A-1 and A-2, 0-65% slopes within the project area.**

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.

The general soils in the area are Warden, Kiona, Shano, Prosser, silty loams.

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

describe. **No.**

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. **Some ground leveling for farms roads, gravel parking areas, and staging area, is anticipated which will include the movement of topsoil and surface rocks. Some gravel fill material may be needed to improve roads. Quantities of materials will vary dependent upon a lessee plan of development.**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **Yes, when the native grasses and shrubs are removed during clearing and leveling, some wind erosion and some run off may occur and will be minimized.**

About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? **It is anticipated that far less than 1% will be covered by impervious surfaces.**

Proposed measures to reduce or control erosion, or other impacts to the earth, if any: **An irrigation system will be installed and water will be available for dust control during construction, as needed. Additionally during construction, cover crops and/or crop residues may be used to control erosion as needed.**

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. **There will be some dust from land clearing and some emissions from farm equipment. The quantities are unknown and will vary dependent on the exact size of the project area.**

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **None, there are no off-site sources of emissions or odors anticipated.**

c. Proposed measures to reduce or control emissions or other impacts to air, if any: **An irrigation system will be installed and water will be available for dust control during construction, as needed. Additionally during construction, cover crops and/or crop residue may be used to control erosion as well.**

3. Water

a. Surface Water:

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. **None**

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. **Approximately 660 acre-feet of water is being contracted from the Kennewick Irrigation District for irrigation in parts of N ³/₄ of Section 14, Township 9 North, Range 27 East, north of I-82, and within the NE ¹/₄ of Section 24, Township 9 North, Range 27 East, north of I-82. No new diversions are occurring.**

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
No, outside the 100-year floodplain

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. **No discharge of waste material to the surface waters.**

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. **Existing ground water right permits/certificates are being used for irrigation on this property. This is being accomplished through the spreading of water that was conserved through the conversion of crop types and implementation of irrigation water management techniques. Please see Exhibit B for additional details. No discharges to groundwater will occur**

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. **No waste discharge will occur.**

c. Water runoff (including stormwater):

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.

Irrigation water management will be used to ensure that irrigation water does not result in off-site run off. Since limited impervious surfaces are planned, stormwater is expected to infiltrate in site soils or follow historic drainage patterns.

Could waste materials enter ground or surface waters? If so, generally describe. **No, very unlikely.**

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. **It is not anticipated that there will be any alteration of drainage patterns.**

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: **As mentioned above, drainage pattern impacts are not anticipated, as drip line irrigation at low pressure is proposed to be used. Road systems will be constructed using culverts were needed, cover crop will be used to control runoff, and irrigation schedules will be controlled.**

4. **Plants:** Check the types of vegetation found on the site:

n/a _deciduous tree: alder, maple, aspen, other,

n/a _evergreen tree: fir, cedar, pine, other

√ _shrubs

√ _grass

n/a _pasture

n/a _crop or grain

n/a _Orchards, vineyards or other permanent crops.

n/a _wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

n/a _water plants: water lily, eelgrass, milfoil, other

___other types of vegetation

What kind and amount of vegetation will be removed or altered? **With this development, it is anticipated that less than 500 acres of shrubs and native grasses may be removed and replaced with vineyard where some ground cover vegetation may be planted.**

List threatened and endangered species known to be on or near the site. **Piper daisy, Wyoming big sage brush are species of concern.**

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: **None at this time.**

List all noxious weeds and invasive species known to be on or near the site. **Cheatgrass, as the project develops, weed control will be an ongoing activity, especially in wildlife corridors.**

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: Long-billed Curlew, Burrowing Owl, Loggerhead Shrike

Mammals: deer, bear, elk, beaver, other: Blacktailed Jack Rabbit, Townsend's Ground Squirrel

Fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site. **None known.**

c. Is the site part of a migration route? If so, explain. **This is a known migration route for Canada Geese and nesting Burrowing Owls.**

Proposed measures to preserve or enhance wildlife, if any: **DNR will continue our efforts to maintain habitat corridors throughout the footprint of the project. Corridors will follow the natural topography of the landscape to retain shrub steppe habitat in drainages. DNR also proposes habitat corridors are treated to eliminate weeds and restore native vegetation.**

List any invasive animal species known to be on or near the site. **None**

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. **Electrical systems will be used to support the irrigation systems and petroleum products will be used to operate the farm equipment.**
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **No**
- 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: **None at this time, however all current irrigation plans are likely to be as efficient as industry can supply.**

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. **Agricultural chemicals could be used during the project farming operations. Any lessee would be required to follow all existing regulations which would include; purchasing only legal chemicals to be used in Washington State, and the adherence to the label application methods during the use of these potentially hazardous materials.**

Describe any known or possible contamination at the site from present or past uses. **DNR is not aware of any contamination from past or present uses.**

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**

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. **As mentioned above farm chemicals may be used during this project and it is not anticipated they will be stored onsite.**

Describe special emergency services that might be required. **None**
Proposed measures to reduce or control environmental health hazards, if any: **None.**

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **None known**
- 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. **The noise created by any farm equipment will be short term, with the greatest impact during the construction phase.**
- 3) Proposed measures to reduce or control noise impacts, if any: **The operation of equipment will be**

limited to daylight periods.

8. Land and shoreline use

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 lands historical use was grazing and irrigated agriculture. The further conversion to irrigated agriculture is compatible with the uses on adjacent properties.**

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? **As mentioned above, the proposal is to convert the permitted use at this site from grazing to irrigated agriculture.**

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: **During construction there will be some heavy equipment/oversized loads moving in and out of the area. In addition, as described above, there will be some pesticide usage, tilling, and harvesting as any vineyard is developed and managed.**

c. Describe any structures on the site. **There are no existing structures in the areas being further developed.**

d. Will any structures be demolished? If so, what? **No**

e. What is the current zoning classification of the site? **Rural Lands 5, with exception of the lands in Section 20, Township 9 N, Range 27 E, which are within the city limits of Benton City.**

f. What is the current comprehensive plan designation of the site? **Agriculture/ Rural**

If applicable, what is the current shoreline master program designation of the site? **N/A**

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. **No**

Approximately how many people would reside or work in the completed project? **None**

j. Approximately how many people would the completed project displace? **None**

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: **None**

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: **This proposal would be compatible with the nearby agricultural lands.**

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **None, there will be no housing units associated with this project.**
- 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: **None**

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? **Some small storage buildings may be constructed.**
- b. What views in the immediate vicinity would be altered or obstructed? **None**
- c. Proposed measures to reduce or control aesthetic impacts, if any: **None**

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **None**
- b. Could light or glare from the finished project be a safety hazard or interfere with views? **No, there will be no anticipated light glare.**
- c. What existing off-site sources of light or glare may affect your proposal? **There are no known off-site light glare sources.**
- d. Proposed measures to reduce or control light and glare impacts, if any: **None**

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? **Hunting is known to occur within this area.**
- b. Would the proposed project displace any existing recreational uses? If so, describe. **No, hunting on the state's parcel or at the adjacent sites would not be impacted by this proposal.**
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: **None**

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 located on or near the site? If so, specifically describe. **None**

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.

Within the project area, DNR has knowledge of a single area with historical evidence. DNR's proposed development takes this into account and plans to ensure that development does not occur within 50 feet of its location. In 2005, a written report from Lee Stilson (DNR's Archeologist) was completed. Following an on ground site survey, the report did not make reference to additional historical artifacts being located.

Additionally, within the project area planned for development, DNR is aware of a cultural site within the project area. After being reviewed by Lee Stilson in the same time period (2005), there was no evidence of cultural resources discovered during the investigation.

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.

DNR TRAX systems and GIS systems were reviewed.

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 development occurs within the areas with known potential for cultural or historical artifacts, DNR is willing to have staff onsite, with experience in dealing with historical/cultural artifacts, as the ground disturbance occur. If artifacts are uncovered, construction will be discontinued within these zones, until consultation with affected parties occur.**
- **Within the area known to have historical artifacts, DNR plans to mitigate any disturbances to resources by ensuring development, within the area, does not occur.**

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. **See Exhibit B, State Highway 224 and nearby county roads.**

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? **There may be some gravel staging areas devolved within the project area, but there will be no off site impacts.**

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). **Some improvements by graveling new roads to ingress and egress to the site is anticipated.**

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. **None anticipated.**

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? **One or two per day through the growing season and ten to fifteen per day during the harvest period.**

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. **Not anticipating any interference with the movement of agricultural products on roads.**

h. Proposed measures to reduce or control transportation impacts, if any: **None**

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. **None**

16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other None

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. **Electricity will be needed at the site as this project is constructed.**

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.

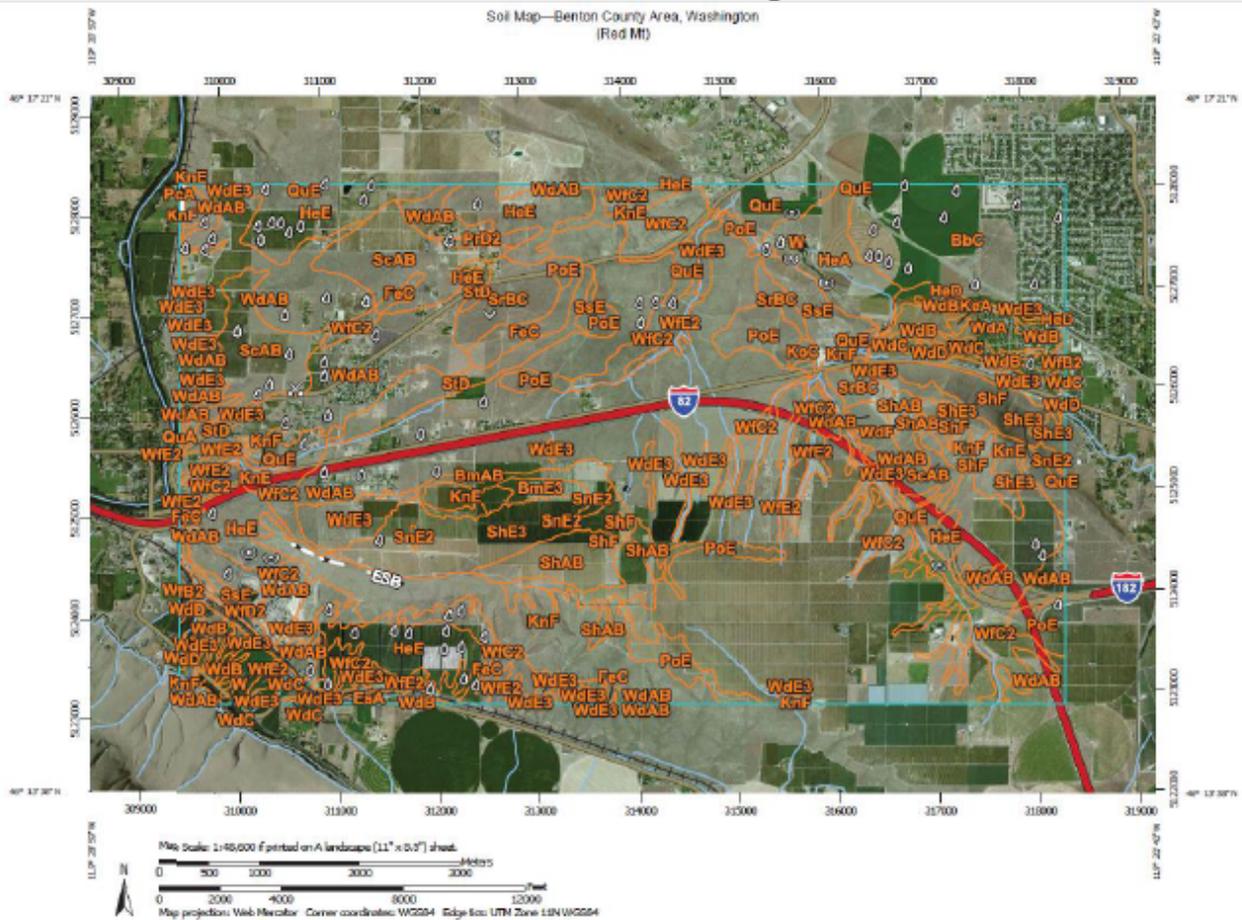
Signature: Rick Roeder for Randy Niessner, SCA

Name of signer Rick Roeder for Randy Niessner, SCA

Position and Agency/Organization _____

Date Submitted: 9/2/15

Exhibit A-1, Soil Maps



USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

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Soil Map—Benton County Area, Washington
(Red Mt)

MAP LEGEND		MAP INFORMATION	
<p>Area of Interest (AOI)</p> <ul style="list-style-type: none"> Area of Interest (AOI) <p>Soils</p> <ul style="list-style-type: none"> Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points <p>Special Point Features</p> <ul style="list-style-type: none"> Blosset Borrow Pit Clay Spot Closed Depression Gravel Pit Gravelly Spot Landfill Leak Flow Mud or swamp Mine or Quarry Miscellaneous Water Periodic Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot Shrubs Slide or Slip Sodic Spot 	<ul style="list-style-type: none"> Spot Area Stony Spot Very Stony Spot Wet Spot Other Special Line Features <p>Water Features</p> <ul style="list-style-type: none"> Streams and Canals <p>Transportation</p> <ul style="list-style-type: none"> Rails Interstate Highways US Routes Major Roads Local Roads <p>Background</p> <ul style="list-style-type: none"> Aerial Photography 	<p>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.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)</p> <p>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.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Benton County Area, Washington Survey Area Date: Version 10, Sep 3, 2014</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Aug 6, 2010—Oct 17, 2010</p> <p>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.</p>	

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Web Soil Survey National Cooperative Soil Survey

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Exhibit A-2, Soil Map Unit Legend

Map Unit Legend

Benton County Area, Washington (WA605)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BbC	Burbank loamy fine sand, 0 to 15 percent slopes	580.5	5.1%
BmAB	Burke silt loam, 0 to 5 percent slopes	71.8	0.6%
BmE3	Burke silt loam, 15 to 30 percent slopes, severely eroded	36.7	0.3%
EsA	Esquatzel fine sandy loam, 0 to 2 percent slopes	36.0	0.3%
FeC	Finley fine sandy loam, 0 to 15 percent slopes	121.3	1.1%
HeA	Hezel loamy fine sand, 0 to 2 percent slopes	210.0	1.8%
HeD	Hezel loamy fine sand, 2 to 15 percent slopes	36.0	0.3%
HeE	Hezel loamy fine sand, 0 to 30 percent slopes	685.7	6.1%
KeA	Kennewick silt loam, 0 to 2 percent slopes	6.4	0.1%
KnE	Kiona very stony silt loam, 0 to 30 percent slopes	247.3	2.2%
KnF	Kiona very stony silt loam, 30 to 65 percent slopes	578.2	5.1%
KoC	Koehler loamy fine sand, 0 to 8 percent slopes	11.3	0.1%
PoA	Pasco silt loam, 0 to 2 percent slopes	0.0	0.0%
PoE	Prosser silt loam, 0 to 30 percent slopes	320.3	2.8%
PrD2	Prosser very fine sandy loam, 0 to 15 percent slopes, eroded	28.8	0.3%
QuA	Quincy loamy sand, 0 to 2 percent slopes	0.1	0.0%
QuE	Quincy loamy sand, 0 to 30 percent	221.9	2.0%
SoAB	Sooteney silt loam, 0 to 5 percent slopes	460.4	4.1%
ShAB	Shano silt loam, 0 to 5 percent slopes	206.8	1.8%
ShE3	Shano silt loam, 15 to 30 percent slopes, severely eroded	453.1	4.1%
ShF	Shano silt loam, 30 to 65 percent slopes	144.3	1.3%

Benton County Area, Washington (WA605)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
SnE2	Shano very fine sandy loam, 15 to 30 percent slopes, eroded	25.2	0.2%
SrBC	Starbuck silt loam, 0 to 8 percent slopes	216.5	1.9%
SsE	Starbuck rocky silt loam, 5 to 45 percent slopes	142.4	1.3%
StD	Starbuck stony silt loam, 0 to 15 percent slopes	177.0	1.6%
W	Water	64.0	0.6%
WdA	Warden silt loam, 0 to 2 percent slopes	104.9	0.9%
WdAB	Warden silt loam, 0 to 5 percent slopes	4,052.2	35.8%
WdB	Warden silt loam, 2 to 5 percent slopes	82.1	0.7%
WdC	Warden silt loam, 5 to 8 percent slopes	77.7	0.7%
WdD	Warden silt loam, 8 to 15 percent slopes	57.0	0.5%
WdE3	Warden silt loam, 15 to 30 percent slopes, severely eroded	454.5	4.0%
WdF	Warden silt loam, 30 to 65 percent slopes	8.2	0.1%
WFB2	Warden very fine sandy loam, 2 to 8 percent slopes, eroded	12.2	0.1%
WFC2	Warden very fine sandy loam, 0 to 15 percent slopes	1,147.8	10.1%
WFD2	Warden very fine sandy loam, 8 to 15 percent slopes, eroded	29.2	0.3%
WFE2	Warden very fine sandy loam, 15 to 30 percent slopes, eroded	188.2	1.7%
Totals for Area of Interest		11,369.3	100.0%

Exhibit B Project Area, Ground Water Right Bonadaries

Water Right Summary
2015 water right change applications and existing rights

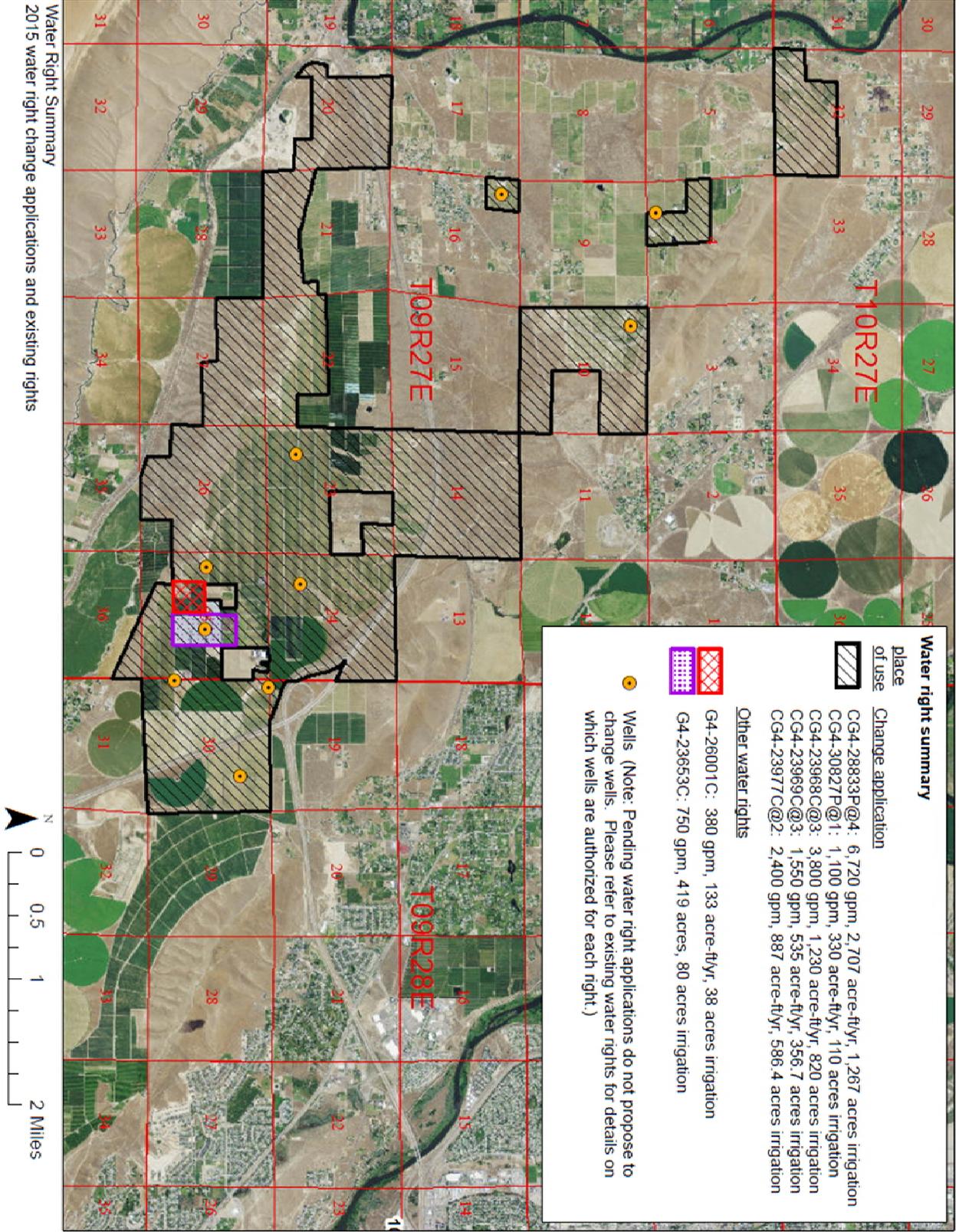


Exhibit C Areas of Public Auction/Further Development/Roads

