WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable: **Sulphur Creek NAWCA Project** (NAWCA = North American Wetlands Conservation Act)

2. Name of applicant: **Rocky J. Ross for the Washington Dept. of Fish & Wildlife**

3. Address and phone number of applicant and contact person: **1820 Road 60, Pasco, WA 99301 (509) 545-2420**

4. Date checklist prepared: **Nov. 3, 2008**

5. Agency requesting checklist: **Washington Dept. of Fish & Wildlife**

6. Proposed timing or schedule (including phasing, if applicable): **Project could start as early as February 2009 and will hopefully be completed by Dec. 2009. It's possible some work could carry over to the summer of 2010.**

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

NO

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

This project is funded by a NAWCA grant, which provides detailed information on the local habitat, wildlife and water sources.

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. **Not for other proposals. A JARPA has been prepared for this project and will be submitted to WDFW, USCOE, DOE and Yakima Co. Planning**

10. List any government approvals or permits that will be needed for your proposal, if known. **Those decisions are pending, based on preliminary information that has been sent to USFWS and USCOE. Potentially, this project may need a 401 and 404 permit. It will need a Shoreline permit, or an exemption.**

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.)

A diversion structure has already been installed upstream of a new weir in Sulphur Creek Wasteway. We plan to bury an underground pipe within a Bureau of Reclamation dike (fee title land) that will deliver water from the wasteway, via gravity flow, to Bridgeman Pond, an isolated oxbow lake, which is located on WDFW-owned land. From there, the flow will cross under McGee Road, via an existing culvert, and into Morgan Lake, another isolated oxbow lake. An old channel leading out of Morgan Lake (dug in the 1950's) will be cleaned to its original depth. Two water control structures, built in the 1950's, will be replaced. These structures will allow water to be directed to the Yakima River or into a newly constructed wetland, located within a historic pasture. Finally, the original outlet structure will be replaced, which will control return flows to the Yakima River.

The intent of this project is to

1) **Reduce the flow in Sulphur Creek Wasteway, thereby reduce the false attraction to salmonids migrating up the Yakima River.**
2) **Increase the flow through Bridgeman Pond and Morgan Lake, to inhibit at least some of the white water lily infestation, which have taken over the water surface.**
3) **Allow water to drop out silt and have nutrients removed before reaching the Yakima River. Water should also be cooled due to the shading from water lilies.**
4) **Provide seasonal water to a newly constructed wetland, which will be managed under moist soil conditions to benefit a wide variety of wildlife. Water will be directed to the Yakima River during the summer months, rather than the moist soil unit, to avoid warming of the water. It will still pass through Morgan Lake and Bridgeman Pond to maintain the cleaning and cooling process.**

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. **This project will begin in T9N, R22E, Section 24 SW1/4 of the NW1/4, in Yakima County. The project begins at the diversion structure on the east bank of Sulphur Creek Wasteway, approximately 500 feet upstream of Holaday Road; near it's intersection with Midvale Road. Work will be performed within the SW1/4 of Section 24 and most of Section 25, which lies north of the Yakima River.**

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other . . . . . .

Generally flat terrain, overall. The project begins outside of the floodway in a generally dry environment with greasewood/saltgrass as the prevalent habitat type. The lower part of the project lies within the floodway of the Yakima River.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slopes occur at the transition from the uplands to the floodplain and can be 30% in some areas. However, the lateral measurement from top of slope to bottom may only be 50 feet. The elevation differential between the diversion and the final outflow is approximately 12 feet but the fall occurs over a distance of almost two miles.

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 prime farmland. **The three primary soil types within the project area are Esquatzel silt loam, Fiander silt loam and Kittitas silt loam.**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. **NO**

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. **No filling will take place, other than placement of materials, which are removed from existing swales and ditches. As mentioned above, a historic ditch will be cleaned at the south end of Morgan Lake to facilitate the increased water flows through the system. This ditch is about 150 feet long. Specific quantities have not been determined, but spoils will be cast to the side of the cleaned ditch and they will quickly be re-infested with reed canarygrass, the prominent vegetation in this area. Within the new wetland footprint, an existing swale in the center of the old pasture will also be cleaned to allow consolidation of water during the summer dry down period. Spoils will be blended into the existing landscape at the sides of the swale. Quantities have not been determined for these spoils. Lastly, an emergency overflow at the outlet will be excavated and refilled with angular rock for stabilization purposes. No net fill will occur from any action of this project.**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **Construction activities will cause bare earth to be exposed to the initial inflow of water. However, initial filling of the wetlands will be tightly controlled through the use of water control structures, allowing silt to settle before water is returned to the Yakima River. These are standard procedures for all new wetland development.**

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? **NONE**

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: **Generally described in (f.). Also, depending on the conditions when the project is completed, a cover crop of annual grain will be seeded to help bind any disturbed soil before water is turned into the system.**

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known. **The construction site will generally be moist during much of the proposed work so dust is not expected to be an issue. If it does become an issue, which affects neighboring landowners, a water truck will be used. A few pieces of construction equipment will be used, which will emit diesel exhaust, but it is not expected to create a problem. The project site has a reasonable buffer of state-owned land around it.**

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **NONE**

c. Proposed measures to reduce or control emissions or other impacts to air, if any: **A water truck will be used to settle dust if it appears to be a problem.**

3. **Water**

a. Surface:

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. **As described earlier, Sulphur Creek Wasteway is the origin of water for this project. It runs year around and has a wide fluctuation in cfs. Bridgeman Pond is an old river oxbow that receives incoming water from irrigation return flows. It dries up completely in late winter/early spring before irrigation water begins flowing. Morgan Lake is another old river oxbow, which holds water on a year around basis, although it decreases measurably during the non-irrigation season. A small wetland, adjacent to Morgan Lake, (called the Johnson Wetland I for reference) holds water on a year around basis, but water levels decrease like they do in Morgan Lake on a seasonal basis. The source of water in these wetlands comes from direct irrigation return flows or groundwater from percolation of irrigation water. All water from these sites enters the Yakima River via subsurface flows**

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. **YES. A water delivery pipeline will end within 200 feet of Bridgeman Pond, and a rock apron will be placed to diffuse the outflow into the pond (an existing irrigation return flow nearby has caused severe head cutting, which will be eliminated). A historic ditch leading out of Morgan Lake will be cleaned out. This activity will all take place within 200 feet of the water's edge. Two water control structures will be replaced near the shoreline of the Johnson Wetland I. A water control structure and emergency overflow will be placed approximately 200 feet from the ordinary high water mark of the Yakima River. The only actual in-water work will take place at the south end of Morgan Lake and at the edge of the Johnson Wetland I. All other work will be done outside of the water.**

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. **Beginning at the top end of the project, all spoils removed to place the delivery pipe will be replaced in the trench. A small amount of angular rock will be placed at the outlet of this pipeline; approximately 10 cubic yards. All spoils cleaned from the Morgan Lake ditch, estimated to be 150 cubic yards, will be cast to the side and blended into the landscape where it will quickly be infested with reed canarygrass. A small amount of material will be removed to place both water control structures near the Johnson Wetland I. This material estimated at approximately 20 cubic yards, will be evenly distributed across the field, which will eventually become the Johnson Wetland II. This area is currently an upland site. Very little material will actually be removed from wetland habitat, and no net fill of wetlands will occur at any stage of this project.**

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. **NO. All activity will be conducted during the lowest water levels of the year so water will not be directly impacted by any activity.**

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. **YES. Approximately the lower half of the project falls within this area.**

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**

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? 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. **No related activity will occur.**

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. **Minimal runoff is expected to occur within the footprint of this project. This area receives 7-9 inches of rainfall per year so even a major storm event would have negligible effects.**

2) Could waste materials enter ground or surface waters? If so, generally describe. **NO**

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: **Runoff will not be a problem. Initial filling of the wetland system could occur in freshly disturbed soils. A cover crop will be seeded to hold soil, and water will be released into the site very slowly, allowing for turbidity to cease before releasing overflow to the Yakima River. If it appears these actions will not assure adequate water clarity, water will be withdrawn to allow vegetation to become established before refilling to the point of discharge.**

4. **Plants**

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

X deciduous tree: **Russian olive, willow, cottonwood**,

_____ evergreen tree: fir, cedar, pine, other

X_____ shrubs: **greasewood, rose, willow**

X_____ grass: **reed canarygrass, tall wheatgrass, quackgrass**

X_____ pasture **(the Johnson Wetland II used to be a flood-irrigated pasture, then became a monoculture of Russian olive trees, and now has been cleared to create new wetland habitat.**

———— crop or grain

X——— **wet soil plants: cattail, bullrush, , other**

X——— water plants: **water lily (white, invasive**)

———— other types of vegetation

b. What kind and amount of vegetation will be removed or altered? **Reed canarygrass is the single prevailing plant within the proposed ditch cleanout project in Morgan Lake. It will reinfest quickly after the cleaning process is completed. The white water lilies should diminish within the area of moving water in both Bridgeman Pond and Morgan Lake, based on similar work performed on Yakama Nation lands. Approximately 35 acres of a Russian olive monoculture have already been removed from a historic, flood-irrigated cow pasture, which will be developed into a moist soil management unit.**

c. List threatened or endangered species known to be on or near the site**. None, although Ute ladies'-tresses (Spiranthes) could have been found in this area historically. Local plant experts agree its presence here is unlikely.**

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: **disturbed upland areas will be reseeded to native grasses. Areas infested with reed canarygrass will be allowed to reinfest because restoration to native grasses has proved to be so difficult. Typically, woody species will not be planted in disturbed areas around water control structures because they can interfere with operations. New seedings will be treated with herbicides with aquatic labels.**

5. **Animals**

a. Circle any birds and animals, which have been observed on or near the site or are known to be on or near the site:

birds: **hawk, heron, eagle, songbirds, other: plus several species of waterfowl and bittern, sora, rails, shorebirds, white pelican, kingfisher**
mammals: **deer, beaver, muskrat, mink, nutria, raccoon, rodents, other:**
fish: **bass, salmon, steelhead, shellfish (crawfish, freshwater clams, snails etc.)**

b. List any threatened or endangered species known to be on or near the site. **Mid Columbia River steelhead are found in the Yakima River. Bull trout are present in the Yakima River system, but there is no designated critical habitat for them near or downstream of this project.**

c. Is the site part of a migration route? If so, explain. **YES, for doves, numerous waterfowl species and neotropical migrants.**

d. Proposed measures to preserve or enhance wildlife, if any: **The increased water flows in Bridgeman Pond and Morgan Lake should reduce the incidence of the invasive white water lily and provide a better ratio of open water. The new wetland development will benefit numerous bird and mammal species. By comparison to current Sulphur Creek Wasteway conditions, increased water quality and decreased false attraction will benefit salmon and steelhead in the Yakima River system.**

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**. Primarily diesel fuel to operate construction 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: **This entire project will improve fish & wildlife habitat by using water in a gravity flow system, rather than similar projects that use electric pumps to deliver water.**

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 only possibility would be a spill of diesel fuel or hydraulic fluid from construction equipment.**

1) Describe special emergency services that might be required. **Ambulance services for on the job injury. Environmental clean up services in the case of a major fuel or hydraulic fluid spill. Fire services if construction equipment catches on fire.**

2) Proposed measures to reduce or control environmental health hazards, if any: **Make sure all contractors are using well-maintained equipment. Make sure all involved parties have an accurate description of the work site location and a list of emergency services (and phone numbers) available in the area.**

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **The site has a reasonable buffer of state-owned land around it and noise problems are not anticipated. Some of the equipment noise will be further buffered by the traffic on highway 241.**

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**. On a short-term basis, noise would come from construction equipment, during daylight hours only. Once the construction is completed, the only noise will hopefully come from increased wildlife using the site.**

3) Proposed measures to reduce or control noise impacts, if any: **NONE. They will be temporary and have minimal affect on neighboring landowners.**

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties? **Wildlife related recreation. Surrounding areas are in agriculture.**

b. Has the site been used for agriculture? If so, describe. **Historically, yes. Crops were grown on a small field adjacent to Morgan Lake and the site for the Johnson Wetland II was historically a flood–irrigated cow pasture.**

c. Describe any structures on the site. **Two very old and inoperable stop log water control structures, and one culvert to drain the collection of water from a flood irrigated field.**

d. Will any structures be demolished? If so, what**? All three structures listed in (c.)**

e. What is the current zoning classification of the site? **Remote/extremely limited development potential**

f. What is the current comprehensive plan designation of the site? **Rural remote/ limited development**

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

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. **Wetlands forming in old river oxbows, river shoreline and associated riparian habitat, floodplain and floodway areas are all considered environmentally sensitive areas. FEMA has mapped floodway and floodplain areas.**

i. Approximately how many people would reside or work in the completed project? **One to three wildlife area employees could potentially be visiting the site to operate and maintain the wetland habitat and adjust water flows, etc..**

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: **based on a site visit with Yakima County Planning, this project is fully compatible with existing and projected land uses and plans for this area.**

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing**. DOES NOT APPLY**

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **DOES NOT APPLY**

c. Proposed measures to reduce or control housing impacts, if any: **DOES NOT APPLY**

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? **No buildings are planned for this project. Water control structures may reach 5 feet in height.**

b. What views in the immediate vicinity would be altered or obstructed? **NONE views have improved with the removal of Russian olives.**

c. Proposed measures to reduce or control aesthetic impacts, if any: **Aesthetics of the area will improve from a monoculture of Russian olive trees to a seasonal wetland with high numbers of diverse wildlife species for viewing.**

11. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **DOES NOT APPLY**

b. Could light or glare from the finished project be a safety hazard or interfere with views? **DOES NOT APPLY**

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: **NONE**

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity? **Public hunting, fishing, hiking, bird watching, horseback riding**

b. Would the proposed project displace any existing recreational uses? If so, describe. **All recreational uses will remain intact, although the change from upland to wetland habitat may limit horseback riding and hunting would be for waterfowl rather than upland birds.**

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: **The condition of this area before we started this project offered very limited recreational opportunities. The monoculture of Russian olives was nearly impenetrable to foot traffic. The removal of olives improved the site considerably. Adding a mix of upland and wetland habitat to the site will create a substantial improvement in recreational opportunity for the public.**

13. **Historic and cultural preservation**

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe. **NO. A cultural resource survey was conducted prior to the removal of Russian olive trees.**

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. **The only landmarks on the site are a pattern of shallow berms, pushed up to help direct sheet water for flooding the original cow pasture.**

c. Proposed measures to reduce or control impacts, if any: **NONE**

14. **Transportation**

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any. **An existing public access area is available from state highway 241, just north of the bridge across the Yakima River. This access point will remain in place. Two other access points are available from McGee Road.**

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop**? UNKNOWN**

c. How many parking spaces would the completed project have? How many would the project eliminate? **Parking would be available from existing points of entry. No parking spaces will be added or eliminated.**

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). **No improvements are planned.**

e. Will the project 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? If known, indicate when peak volumes would occur. **Hunting season would probably be the peak use for the site, but vehicle trips per day will depend on local conditions. It's possible to have a dozen trips per day on this site.**

g. Proposed measures to reduce or control transportation impacts, if any: **NONE. Usually, it's site limiting. If it's crowded, people move on. In severe cases of crowding, a permit system could be entertained.**

15. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, 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 are currently used, but electricity, telephone and refuse service could be available. We will not need any of these for the project.**

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. **NONE**

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: ON FILE- Rocky Ross

Date Submitted: 11/3/2008