State of Washington

DEPARTMENT OF FISH AND WILDLIFE

Habitat Program: 600 Capitol Way N, Olympia, Washington 98501-1091 - (360) 902-2534

ENVIRONMENTAL CHECKLIST

(WAC 197-11-960)

A. BACKGROUND

1. Name of proposed project, if applicable:

Whiskey Dick Grazing Permit

2. Name of Applicant:

Washington Department of Fish and Wildlife (WDFW)

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

Cindi Confer, Wildlife Area Manager.
201 N. Pearl St
Ellensburg, WA 98926
Phone (509) 925-6746

4. Date checklist prepared: April 13-24, 2007

5. Agency requesting checklist: *Washington Department of Fish and Wildlife*

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

The Lone Star and Rocky Coulee pastures would be available for cattle grazing for a total of 30 days between April 1 and May 15 of each year in 2008, 2009, and 2010. Pasture rotation for the remaining term of the permit will be based on evaluation of the previous three seasons of use. The grazing permit may be renewed every 5 years provided objectives are being achieved.

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

Yes, this plan is part of a larger Coordinated Resource Management plan that involves additional WDFW ownership, including the remainder of the Whiskey Dick Wildlife Area (WA) and the newly acquired Skookumchuck drainage. Grazing plans may be developed for these areas in the future if fencing and water development issues are addressed. At that time, SEPA would be conducted on any areas that are not categorically exempt (WAC 197-11-800).

The Wild Horse CRM planning process began in January of 2006; the project area comprises approximately 62,000 acres in northeastern Kittitas County. The CRM process has brought together ranchers, local landowners, Natural Resources Conservation Service and several environmental groups to collaboratively plan to improve management of the CRM area. Ownership is a mixture of public and private landowners, including WDFW, WDNR, BLM, Puget Sound Energy (PSE), and American Minerals. In addition to the Whiskey Dick WA, WDFW ownership within the CRM project area includes 5,441 acres of the Skookumchuck drainage, which was acquired in 2006 and will be managed as part of the Quilomene WA. By spreading the grazing across a larger landscape, the CRM process allows for a reduction in the grazing intensity and the potential for recovery and restoration in the areas of the

landscape that have been overgrazed in the recent past. In a CRM all landowners retain final authority to make management decisions on their land. Each landowner is responsible for it's own permitting process and implementation of grazing on other ownerships does not hinge on approval of grazing on the WDFW ownership.

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

1. WDFW Priority Species and Habitat Management Recommendations (Contact WDFW Habitat Program or see at: http://wdfw.wa.gov/hab/phspage.html)
2. WDNR Heritage Database (Contact WDNR Natural Heritage Program or see at: http://www.dnr.wa.gov/nhp/refdesk/plants.html)
3. GIS generated maps showing: Soil type, erosion potential, soil stability, and hydrologic maturity from NRCS and Kittitas County Conservation District (Draft) (Contact U.S. Natural Resources Conservation Service for a copy of data).
4. Rangeland Inventory (Contact WDFW)

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.
None known

10. List any government approvals or permits that will be needed for your proposal, if known.
WDFW Grazing Permit is the action under review.

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.
WDFWs grazing management plan for the Whiskey Dick WA is part of a larger, 62,000-acre Coordinated Resource Management (CRM) planning process. Ownership in the CRM project area is a mixture of public and private landowners, including WDFW, WDNR, BLM, Puget Sound Energy (PSE), and American Minerals.

Under the CRM plan, there are four pastures available for the 2008 and 2009 grazing seasons. Of these, two pastures, Lonestar (5,377 ac) and Rocky Coulee (3,041 ac) are located in the Rocky Coulee drainage within the Whiskey Dick WA and contain WDFW, WDNR, and BLM ownership. These pastures will be available for 160 AUMs of livestock grazing for a 30-day period between April 1 and May 15. In 2010, for the third year of grazing, either the Lonestar pasture will be removed from the grazing schedule for the year or both Lonestar and Rocky Coulee pastures will have a shorter, earlier grazing period to ensure compliance with the HB 1309 Ecosystem Standards for State-Owned Agricultural and Grazing Land (ESAC 1994). Under the CRM, PSE will provide grazing on the Wild Horse Wind Project to meet the anticipated AUM needs. No livestock grazing will occur on the WA outside of the Lonestar and Rocky Coulee pastures. Only cattle grazing is permitted.

Livestock watering troughs at four locations are scheduled to be replaced, and some of the pipes that deliver water to the troughs will be replaced by the permittee with funding provided by the Natural Resources Conservation Service's Environmental Quality Incentives Program (EQIP). As per EQIP standards the new troughs will be installed over a six-inch layer of washed gravel that extends around the trough approximately six feet.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including 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.

The project area is approximately 15 miles east of Ellensburg. The Lonestar and Rocky Coulee pastures of the Whiskey Dick WA are located about two miles northwest of the town of Vantage in eastern Kittitas County. Specifically, the pastures lie within portions of Sections 11, 12, 13, and 14 of Township 17 North, Range 21 East, and Sections 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 21, and 22 of Township 17 North, Range 22 East, Willamette Meridian.

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

The Whiskey Dick WA is located on the breaks above the upper mid-Columbia river and is characterized by steep, rocky slopes, and a rolling series of ridges and canyons that generally drain west to east.

The Lonestar and Rocky Coulee pastures of the Whiskey Dick WA range in elevation from 1,000 to 2,600 feet, with the topography being steep along the major drainage, Rocky Coulee, and flat to rolling along the ridgetops.

The parent bedrock material in the region consists of basaltic rock, and includes fractured and folded lava flows. The basalt material has weathered down into coarse gravels, cobbles, and boulders, with fine silts and clays. The overlying soil is composed of fine-grained loess, deposits of volcanic ash, sandy loams, and silt loams. The pastures are dominated by sagebrush-steppe and scablands, with a narrow band of riparian habitat occurring along the coulee bottom. A mosaic of sagebrush-steppe and scabland plant communities typically covers north-facing hillslopes. Precipitation averages six to nine inches annually.

b. What is the steepest slope on the site (approximate percent slope)?
The steepest slopes are approximately 45% on 5% of the project area and it would average under 20 percent for the entire 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 prime farmland.

014: Jumpe Stony Loam, on 25 to 45% north slopes
018: Loneridge Stony Loam, on 0 to 25% slopes
024: Loneridge Stony Loam, on 25 to 45% north slopes
027: Tekison Stony Loam, on 0 to 25% slopes
032: Stemilt Loam, on 25 to 45% slopes
049: Jumpe Stony Loam, on 25 to 45% slopes
052: Loneridge Stony Loam, on 45 to 65% north slopes
053: Tekison Stony Loam, on 25 to 45% slope

The majority of the proposal lies in the 018, 024, 032 and 053 soils types, less than 5% in areas approaching 45% slopes. (From NRCS and Kittitas Co. Conservation District, draft).

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
No, not in this area.

e. Describe the purpose, type and approximate quantities of any filling or grading proposed. Indicate source of fill.
No grading or filling is proposed under this project.

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

No, the cattle grazing will be managed and limited in nature and will not result in erosion. Erosion hazard for the soils in the grazing area is rated by NRCS soil survey as slight to moderate for off-road or off-trail use such as will occur with the proposed livestock grazing plan. Initial turnout of livestock in the spring will be delayed until soils have dried sufficiently to preclude erosion problems. The stocking rate for the grazing area is very light (0.02 AUMs per acre), which is highly unlikely to result in erosion.

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:
None.

2. Air

a. What type 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.
This proposal will involve vehicle emissions from hauling cattle on and off of the site, as well as moving the cattle to keep them well distributed within the pastures. Vehicle emissions will also occur from bringing in materials for stock fence repair and redevelopment of springs. There should be no significant impact to air quality.

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

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
None proposed.

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 or wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.
Rocky Coulee is an intermittent stream that flows primarily during early spring runoff and has short stretches of surface flow associated with springs. There are no fish present in Rocky Coulee. Rocky Coulee flows into the Columbia River, just above Vantage.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and <u>attach available plans.</u>
Yes, grazing by cattle will occur within the Rocky Coulee drainage. As part of the grazing permit, the permittee is required to keep the cattle well distributed across the landscape to minimize effects to the drainage channel and wet areas. This will be accomplished by herding, fencing and/or salting. Grazing is limited to 30 days (19 days in Lonestar pasture and 11 days in Rocky Coulee pasture) in the 8,418-acre project area.

In addition, four developed springs within the project area will be improved to direct cattle and reduce use of the wet areas. The spring improvements will meet Natural Resource Conservation Service (NRCS) standards, including armoring a six-foot radius around the water trough, providing overflow piping back to the drainage, and providing small mammal escape ramps.

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.
Does not apply.

4) Will the proposal require surface water withdrawals or diversions? Give general description,

purpose, and approximate quantities if known.
Yes, however WDFW has water rights claims on the four springs identified for improvement. In addition, stock water use is exempted by Washington Department of Ecology (WDOE) and the overflow water is being returned to the same source, at or near the point of diversion, consistent with WDOE Policy 1025—Policy for Conveying Stockwater Away from Streams to Protect Water quality.

5) **Does the proposal lie within a 100-year floodplain? ____ YES. _X_ NO.**
If so, note location on the site plan.

6) **Does the proposal involve any discharges of waste material to surface waters? If so, describe the type of waste and anticipated volume of discharge.**
No.

3. WATER
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 waste material will be discharged into the ground. Cattle manure will occur on the ground, but not at any level that could affect ground water.

c. Water Runoff (including storm water):

1) **Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**
Spring runoff from snow melt, and rain the rest of the year will continue to flow naturally to into the Rocky Coulee drainage as it has historically done.

2) **Could waste materials enter ground or surface waters? If so, generally describe.**
Cattle manure could enter surface water. The amount is anticipated to be small due to the low stock density (160 cow/calf pairs on 8,418 acres) and have little or no effect on water quality.

d. Proposed measures to reduce or control surface, ground and runoff water impacts, if any:
No specific measures are proposed.

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

___ **deciduous tree: alder, maple, aspen, other:**

___ **evergreen tree: fir, cedar, pine, other:**

_X_ **shrubs: big sagebrush, stiff sagebrush, bitterbrush, wild rose, willow, elderberry, serviceberry**

_X_ **grass: bluebunch wheatgrass, Sandberg's and Cusick's bluegrass, needle and thread grass, Thurber needlegrass, squirreltail, cheatgrass, bulbous bluegrass**

___ **pasture**

__ crop or grain food

___ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

___ water plants: waterlily, eelgrass, milfoil, other

___ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?
The grazing plan allows about 30 days of grazing by 160 head of cattle (cow/calf pairs) between April 1 and May 15. During this time cattle will forage primarily on grasses mentioned above, although some forbs and shrubs will be consumed as well. Thirty days of grazing by 160 head of cattle (cow/calf pairs) will result in the consumption of about 160 AUMs of forage. An AUM (animal unit month) is the amount of forage consumed during one month by a cow, with calf. It is approximately equivalent to 790 pounds of oven-dry weight (USDA 1997). Utilization of about 160 AUMs of forage by livestock represents removal of about 20 percent of the total forage production estimated from the range inventory. The actual amount removed will be less than 20 percent since livestock will leave the grazing area before the end of the growing season and there will be regrowth old perennial vegetation. If during the vegetation monitoring it is determined that the amount of material removed exceeds the planned level of use, then the permit will be modified to bring use to acceptable levels.

c. List threatened and endangered species [of plants] known to be on or near the site.
Rare plants information obtained from the Washington Natural Heritage Program indicates that Hoover's tauschia (*Tauschia hooveri*) is reported to occur in T17N R21E, sections 11, 13, and 14; and hedgehog cactus is reported to occur in T17N R21E, sections 11 and 14, and T17N R22E, sections 17 and 21.

Hoover's tauschia is listed as State Threatened and a USFWS Species of Concern (Washington Natural Heritage Program 2007). It occurs in lithosol habitats in shrub-steppe areas. Lithosol habitats are characterized as having very shallow soil (generally less than 12 inches deep) over basalt bedrock, with very stony or rocky soil surface and a sparse, low-growing plant cover. Additional species typically found on these sites include Sandberg's bluegrass, stiff sagebrush, sagebrush violet, bitterroot, and fleabane species. Threats and management concerns for Hoover's tauschia include land development such as housing and orchards that removes the plant cover, herbicide spray drift, grazing, ORV use, and road construction. Hoover's tauschia is not likely to be affected by livestock use due to its phenology; it flowers in early March and by late April plants have begun to become senescent. In addition, lithosol sites are generally not attractive to livestock due to the scant amount of forage available and the rocky nature of the soil surface (Daubenmire 1970).

Hedgehog cactus is listed in State Review Group 1 indicating that more field work is needed to assign another rank (Washington Natural Heritage Program 2007). This species is found on thin rocky soils, and frequently co-occurs with stiff sagebrush, Sandberg's bluegrass, desert-parsley, phlox, and buckwheat species. Livestock do not eat hedgehog cactus. In addition, lithosol sites are generally not attractive to livestock due to the scant amount of forage available and the rocky nature of the soil surface (Daubenmire 1970). The Washington Natural Heritage Program indicates that cactus collectors represent the greatest threat to this species.

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

5. ANIMALS

a. Circle any birds or 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: sage sparrow, sage thrasher, sage grouse, horned

lark, loggerhead shrike, chukar. Prairie falcon nest within one mile and Peregrine falcon eyrie within 1.25 miles of the project area.

Mammals: deer, bear, elk, beaver, other: cougar, coyote, white-tailed and black-tailed jackrabbits

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

b. List any threatened or endangered species known to be on or near the site.
Sage grouse (state threatened and federal candidate) sitings have occurred within the project area. A lek was identified approximately three miles outside of the project area in the early 1980's.

c. Is the site part of a migration route? If so, explain.
Yes, the Whiskey Dick WA is used as elk and mule deer winter range. Deer and elk migrate north and west from Whisky Dick during other seasons.

d. Proposed measures to preserve and enhance wildlife, if any:
Managed grazing by livestock can change the species composition of plant communities, increase production of selected species, improve the nutritive quality of forage species, and increase habitat diversity by changing plant community structure across the landscape (Vavra 2005). Moderate grazing by livestock removes older, rank grass and increases the availability of the more palatable and nutritious spring or fall regrowth. Properly timed livestock grazing can be used to increase the forb component of plant communities which in turn provides for increased insect production which may benefit ground nesting birds and small mammals. Large ungulates like cattle and elk do not graze rangelands uniformly due to forage preferences and physiographic features of the landscape. Since cattle and elk have different forage preferences (Stewart et al. 2003), dual use by both species can produce increased plant community structural diversity as a result of forage selection choices by each species and the patchy nature of their use of the landscape. The importance of herbivory in the effective functioning of wildlife habitats has gained increased recognition over the past few decades (Severson and Urness 1994, Lyon and Christensen 2002). Although the effects of poorly managed livestock grazing are well documented (Belsky 1992, Fleischner 1994, Donahue 1999), it is evident that some level of grazing can help maintain healthy and diverse grassland plant communities (Lyon and Christensen 2002, Hayes and Holl 2003, Rambo and Faeth 1999).

Spring grazing is planned to limit effects to wildlife species. It is expected that the 30 days of grazing within the April 1 to May 15 period will be after wintering elk have moved out of these pastures, while still occurring prior to the main ground bird nesting period. The grazing will be concluded early enough in the growing season to allow for plant regrowth and seed production.

Monitoring of cattle distribution and vegetation use will occur as detailed in the Whiskey Dick Grazing Plan. A range inventory for the project area was completed in 2006 and was used to develop the grazing plan. Baseline vegetation and photo point monitoring will be conducted in 2007 and again in 2008 prior to cattle turnout.

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.
Fuel to operate vehicles for transporting the cattle and monitoring their use will be required.

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:

Does not apply.

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.
Does not apply.

1) Describe special emergency services that might be required.
Does not apply.

2) Proposed measures to reduce or control environmental health hazards, if any:
Does not apply.

b. Noise

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

2**) What types and levels of noise would be created by or associated with the project on an short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**
No additional noise is expected associated with this project.

3) Proposed measures to reduce or control noise impacts, if any:
Does not apply.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?
Wildlife habitat, recreation activities, rangeland grazing, and windpower.

b. Has the site been used for agriculture? If so describe?
Prior to state ownership, the area had a long history of heavy livestock grazing including use by horses, sheep and cattle.

c. Describe any structures on the site.
There are water troughs associated with the developed springs, the wellhead and pump associated with the “Pumphouse” well, the remains of a concrete block building at Hell’s Kitchen, and boundary and interior stock fence.

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

e. What is the current zoning classification of the site?
Commercial Agriculture - Forest and Range

f. What is the current comprehensive plan designation of the site?
Maintain as rangeland with emphasis on managing habitat for wildlife.

g. If applicable, what is the current shoreline master program designation of the site?
Does not apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
None noted.

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

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

k. Proposed measures to avoid or reduce displacement impacts, if any:
Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
Part of L.T. Murray/Quilomene/Whiskey Dick Wildlife Areas Plan, which can be veiwed on the WDFW website at: http://wdfw.wa.gov/lands/wildlife_areas/management_plans/index.htm

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:
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?
Does not apply

b. What views in the immediate vicinity would be altered or obstructed?
None

c. Proposed measures to reduce or control aesthetic impacts, if any:
Does not apply

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?
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?
Hunting, fishing, camping, hiking, horse riding and wildlife viewing.

b. Would the proposed project displace any existing recreational uses? If so, describe.
None.

c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any:
None.

d. Positive impacts of the proposal.
WDFW anticipates improving the palatability and forage quality of native bunchgrasses by removing some of the new growth and accumulated standing litter, then allowing adequate time for spring regrowth to occur. This will increase the availability of the current year's regrowth for big game, especially elk, during fall and winter. Vegetation will be monitored to determine the amount of forage removed and the amount of forage regrowth.

This grazing proposal is also part of a larger coordinated resource management plan one purpose of which is to try and improve overall ecosystem health on 62,000 acres in the larger area planning area.

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.
There are two inventoried sites within the project area and an additional 14 inventoried sites within one mile of the boundary of the project area. All sites are typed as 'Pre-Contact'. Within the project area there is one site identified as a 'Short Term Occupation Site' and one site identified as a 'Lithic Scatter/Quarry/Misc Tool/Debitage'. Of the sites outside of the project area, six are identified as 'Lithic Scatter/Quarry/Misc Tool/Debitage'; four are identified as 'Short Term Occupation Site'; two are identified as 'Walls, Circles, Figures and Misc Rock Features'; one is identified as a 'Cairn'; and one is identified as a 'Single Artifact- Flake, Knife, Point, Pestle, Canoe Anchor, Net Sinker, etc.'

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
See Above.

c. Proposed measures to reduce or control impacts, if any:
No ground disturbing activities will occur near any known locations. Cultural resource surveys will be conducted in any area proposed for ground disturbing activities. If any evidence of historic, archaeological, scientific, or culturally important items is found, all work will cease until the site has been reviewed by an archaeologist and a plan for protection identified.

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.
The Vantage Highway is along the southern project boundary. The Pumphouse and Whiskey Dick Ridge roads access the project area.

b. Is site currently served by public transit? If no, what is the approximate distance to the nearest transit stop?
No, there are school bus stops along the Vantage Highway.

c. How many parking spaces would the completed project have? _____
How many would the project eliminate? _____
The project will not affect the number of parking spaces.

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

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.
This proposal should result in no increase in vehicle trips per day upon completion of the project.

g. 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, health care, schools, other)? If so generally describe.
None

b. Proposed measures to reduce or control direct impacts on public services, if any:
None

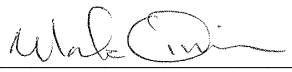
16. UTILITIES

a. Circle utilities currently available at the site: ELECTRICITY, NATURAL GAS, WATER, REFUSE SERVICE, TELEPHONE, SANITARY SEWER, SEPTIC SYSTEM, OTHER.
The Pumphouse well is currently defunct, but historically had electricity to the wellhead, allowing water to be pumped at the site to provide stock water. This well is located on WDNR ownership.

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: 

DATE SUBMITTED: **April 26, 2007**

References

Belsky, A.J. 1992. Effects of grazing, competition, disturbance and fire on species composition and diversity of grassland communities. Journal of Vegetation Science 3:187-200.

Daubenmire, R. 1970. Steppe vegetation of Washington. Washington Agricultural Experiment Station, Technical Bulletin 62.

Donahue, D.L. 1999. The western range revisited: removing livestock from public lands to conserve native biodiversity. University of Oklahoma Press, Norman, OK.

Fleischner, T.L. 1994. Ecological costs of livestock grazing in western North America. Conservation Biology 8:629-644.

Hayes, G.F., and K.D. Holl. 2003. Cattle grazing impacts on annual forbs and vegetation composition of mesic grasslands in California. Conservation Biology 17:1694-1702.

Lyon, L.J., and A.G. Christensen. 2002. Elk and land management. Pages 557-581 *in:* D.A. Toweill and J.W. Thomas [eds.]. North American Elk: Ecology and Management. Smithsonian Institution Press, Washington D.C.

Rambo, J.L., and S.H. Faeth. 1999. Effect of vertebrate grazing on plant and insect community structure. Journal of the Society for Conservation Biology 13:5. [Online.] URL: http://www.earthscape.org/r2/scb/scb13_5/fas01.html .

Severson, K.E., and P.J. Urness. 1994. Livestock grazing: A tool to improve wildlife habitat. Pages 232-249 *in:* M. Vavra, W.A. Laycock, and R.D. Pieper [eds.]. Ecological Implications of Livestock Herbivory in the West. Society for Range Management, Denver, CO.

Stewart, K.M., R.T. Bowyer, J.G. Kie, B.L. Dick, and M. Ben-David. 2003. Niche partitioning among mule deer, elk, and cattle: Do stable isotopes reflect dietary niche? Écoscience 10:297-302.

U.S. Department of Agriculture, Natural Resources Conservation Service. 1997. National Range and Pasture Handbook. U.S. Department of Agriculture, NRCS Grazing Lands Technology Institute. Washington, D.C.

Vavra, M. 2005. Livestock grazing and wildlife: Developing compatibilities. Rangeland Ecology and Management 58:128-134.

Washington Natural Heritage Program. 2007. List of known occurrences of rare plants in Washington, Kittitas County, February, 2007. [Online.] URL: http://www.dnr.wa.gov/nhp/refdesk/lists/plantsxco/kittitas.html