

SEPA environmental checklist

A. Background

1. Name of proposed project, if applicable:

HPA Suction Dredge Rule Making 2019 - Hydraulic Code Rules WAC 220-660-030, 220-660-300, and new section 220-660-305

2. Name of applicant:

Randi Thurston
Washington Department of Fish and Wildlife

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

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Other: HPA rulemaking website: <http://wdfw.wa.gov/licensing/hpa/rulemaking/>

4. Date checklist prepared:

February 20, 2019

5. Agency requesting checklist:

Washington Department of Fish and Wildlife

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

CR-102 was filed February 20, 2019. Washington Fish and Wildlife Commission is planning to hold a public hearing April 5 or 6, 2019. Planned adoption is late-April or early May 2019. Effective Date in June 2019.

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

There are no plans for changes to these sections after the current rule making activity. We would respond to future direction from Fish and Wildlife Commission to conduct rule making on this subject when/if it is forthcoming.

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

Previous rulemaking for this WAC chapter was conducted in early 2018, 2014, and 2008.

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

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

None

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.)

In April 2018, the Fish and Wildlife Commission directed Washington Department of Fish and Wildlife (WDFW) staff to initiate rule making activity to:

- Require an individual Hydraulic Project Approval (HPA) for suction dredging in Washington waters;
- Remove suction dredging as an authorized activity in the Gold and Fish Pamphlet;
- Develop application and reporting methods to enable WDFW to determine the number of prospectors engaged in suction dredging and where and how much suction dredging occurs; and
- Identify methods to prevent the spread of aquatic invasive species through the movement of suction dredging equipment into and around the state.

WDFW has initiated rule making to implement these objectives. Proposed changes are primarily administrative, and include:

1. Update the definition of suction dredging to include non-motorized suction (gravity) dredges, dryland dredging, and hand-operated dredges. At the request of a commenter, we also propose to update the definition of "dredge" to exclude subsurface hard rock mining (WAC 220-660-030);
2. Remove the suction dredging activity from the Gold and Fish pamphlet mineral prospecting rules (WAC 220-660-300). Remaining rules will be edited for clarity. No changes to provisions or authorized work times will be made.
3. Create a new section exclusively for suction dredging (WAC 220-660-305) that carry over the suction dredging provisions that are being removed from WAC 220-660-300. This includes regulation of suction dredge/high-banker/power sluice combination equipment when being used in suction dredge mode.
4. Create application methods for suction dredging;
5. Require inspections and decontamination to prevent spread of aquatic invasive species.
6. Add a sub-section with provisions for dryland dredging. Provisions for dryland dredging are the same as provisions for high-banking within WAC 220-660-300. No new activity is expected as a result of this change.
7. Add requirement for suction dredgers to submit annual report regarding the date, amount, type, and location of suction dredging activities

Provisions for dryland dredging and preventing the spread of aquatic invasive species are the only non-administrative changes under the proposal.

In summary, with the exception of the provisions for dryland dredging and aquatic invasive species mentioned above, this proposal only implements a change in the way

suction dredging is permitted and a change in reporting requirements. There are no anticipated changes to the effort, locations, typical equipment, or manner of suction dredging activity in Washington.

Note that references to suction dredging in the following checklist incorporate all methods in the definition of suction dredging, and also refer to suction dredge/high-banker/power sluice combination equipment when those combinations are being used in suction dredge mode.

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.

The HPA program applies statewide. There are no anticipated changes to the locations of suction dredging activity associated with the proposal.

B. environmental elements

1. Earth

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other (See below)

Suction dredging for minerals occurs on placer mineral deposits, typically in or adjacent to current or former beds of streams. There are no anticipated changes to locations or effects of suction dredging activity associated with the proposal.

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

Existing mineral prospecting regulations prohibit excavation, collection, or removal of aggregate from an unstable slope, the toe of any slope, or a portion of any slope that delivers, or has the potential to deliver sediment to state waters. There are no changes associated with the proposal to HPA provisions protecting slopes.

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.

Work sites within the bed of Washington waterbodies typically are composed of sand, gravel, and rock. Soil composition in upland work sites will vary depending on their location.

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

Existing mineral prospecting regulations prohibit excavation, collection, or removal of aggregate from an unstable slope, the toe of any slope, or a portion of any slope that delivers, or has the potential to deliver sediment to state waters. There are no changes associated with the proposal to HPA provisions protecting unstable soils.

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.

Excavations of varying extent occur in order for prospectors to recover placer gold and other minerals. Excavations can be of as little as a few handfuls of stream gravels to the movement of up to a maximum output of 10 cubic yards per hour of aggregate with a five-inch suction dredge using two 6.5 horsepower engines operating continuously under test conditions. Typical equipment in Washington is a four-or-five-inch nozzle suction dredge operating with one 5-to-6.5 horsepower engine. Practical operation of mineral prospecting equipment excavates much less volume than the equipment's maximum output. Fill material comprises tailings that result from processing aggregate collected from the excavation site or other stream gravels collected from the work site within the stream. There are no anticipated changes to locations, methods, equipment, or effects of suction dredging activity associated with the proposal.

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

Yes. Excavations disturb the earth at the excavation site. Most excavations are within active stream channels, which are inherently unstable and constantly changing. Excavations in areas upland to state waters occur, but are restricted by existing regulation to areas that are stable and not likely to deliver sediment to state waters. However, because excavations disturb the earth, it is possible that erosion could result until the excavation sites stabilize. There are no changes associated with the proposal to HPA provisions protecting unstable soils.

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

None

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

Stream gravels will not be removed permanently from the stream, but will be rearranged within the stream. Existing regulations prohibit disturbance of live rooted woody vegetation, disturbance of embedded large woody debris within the wetted perimeter, and excavation on unstable slopes, the toe of slopes, or any portion of slope that delivers or has the potential to deliver sediment to state waters. Existing rules, in most cases, require filling and leveling pits, holes, and tailing piles before leaving the site. There are no changes associated with the proposal to HPA provisions protecting unstable soils or other impacts to earth.

2. Air

There are no changes in the effects to air associated with the proposal.

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.

Operation of pumps and other equipment (such as electrical generators) powered by internal combustion engines result in emissions of minor amounts of exhaust fumes during dredging, high-banking and/or processing of aggregate by other means. Minor amounts of gasoline might be spilled during fueling of these engines resulting in minor gasoline fumes

in the immediate vicinity. There are no changes in the effects of suction dredging activity to air quality or emissions associated with the proposal.

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

No

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

None

3. Water

There are no changes in the effects to water associated with the proposal.

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.

Suction dredging occurs in many waters throughout Washington. There are no anticipated changes in the locations of suction dredging activity associated with the proposal.

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.

Most excavations occur within or adjacent to state waters.

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.

Mineral prospecting involving excavation of up to 50 cubic yards can be permitted under SEPA exemption pursuant to WAC 197-11-835(2). Excavation involving 50 cubic yards or more requires SEPA review prior to HPA permitting.

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

No change to existing water withdrawal or diversion regulations is associated with this proposal. Suction dredging, suction dredge/high-banking combinations, and dryland dredging require diversion of water. The maximum pump intake hose size is 4 inches so the amount of water withdrawn by a single piece of equipment is limited by that factor. The maximum amount of water possible to withdraw with a single pump is approximately 600 gallons per minute. Proper operation of mineral prospecting equipment requires much less water volume than the equipment's maximum intake. Existing regulations allow the partial diversion of stream flow into sluices, but the diversion structure may not be greater than fifty percent of the wetted perimeter width, and water may not be diverted outside the wetted perimeter. There are no changes in water use of suction dredging activity associated with the proposal.

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

Yes, most excavations occur within or adjacent to state waters. There is no change to the location of suction dredging activity associated with this proposal.

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.

Tailings resulting from processing of aggregate are returned to the location where aggregate was collected, which, in most cases, is within the wetted perimeter of a stream. These tailings are not substantially altered from their condition when excavated with the exception that aggregate may be graded for size and minor quantities of valuable minerals removed. Typically, tailings are less consolidated than their prior condition, and more susceptible to erosion. Tailings contain rocks of varying size, settleable solids and suspended sediment. No changes to existing waste discharge regulations are associated with this proposal.

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.

Ground water is not withdrawn. Discharge to groundwater would be indirect - wastewater is discharged to vicinity earth and soils or to the stream depending on the equipment used. The maximum amount of water discharge for the largest pump allowed by existing mineral prospecting rules could be as high as 600 gallons per minute per site. Much less than maximum discharge is required for efficient use of most mineral prospecting equipment, however, so it is unlikely that such large volumes of water are discharged by individual projects authorized by the rules. No changes to existing waste discharge regulations are associated with this proposal.

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.

None

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.

Two sources of runoff water are possible for projects conducted under existing mineral prospecting regulations and no changes are associated with the proposal. Storm water runoff occurs during storms if the ground does not absorb storm precipitation. Projects don't create impervious surfaces, so storm water runoff would be the result of amounts of precipitation greater than the ability of the landscape to absorb it. Projects conducted under existing mineral prospecting regulations are not required to collect, treat, or dispose of storm water runoff. Runoff also occurs when water is run through mineral prospecting equipment that is not situated instream. Quantities could be as high

as 600 gallons per minute. Existing regulations prohibit visible sediment plumes from entering the wetted perimeter of state waters.

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

Yes. As described above, tailings containing rocks of varying size, settleable solids, and suspended sediment will be discharged to state waters and to upland areas. Minor quantities of gasoline and other petroleum products necessary for operating internal combustion engines could spill and enter ground or surface waters. No changes in the probability of these events occurring are associated with the proposal.

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

No.

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

Existing mineral prospecting regulations and permit provisions prevent tailings or visible sediment plumes from entering areas where redds or vulnerable fish life are located. When working outside of the wetted perimeter, visible sediment or muddy water is prohibited from entering the stream. Prospectors are prohibited from excavating, collecting, or removing aggregate from the toe of the slope. There are also prohibitions against excavating, collecting, or removing aggregate from any slope that delivers, or has the potential to deliver, sediment to the wetted perimeter or frequent scour zone.

All equipment fueling and servicing is required to be done so that petroleum products do not enter the wetted perimeter or frequent scour zone. If a petroleum sheen or spill is observed, prospectors must contact the Washington Military Department Emergency Management Division. They must immediately stop their activities, remove equipment from the body of water, and correct the source of the petroleum leak. They may not return equipment to the water until the problem is corrected.

No changes to provisions protecting surface water, groundwater, runoff water, and drainage patterns are associated with this proposal.

4. Plants

There are no changes in the effects to plants associated with the proposal.

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

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

Orchards, vineyards or other permanent crops.

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

Depends on the location of the prospecting site. There are no changes in the location of suction dredging activity anticipated under the proposal.

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

Vegetation of any quantity can be disturbed under the proposed rules unless it is live rooted woody vegetation or embedded large woody material. There are no changes in the effects of suction dredging activity associated with the proposal.

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

Unknown. Precise locations for projects that would occur under the proposed rules aren't known at this time. Associated with the proposal are provisions that will help WDFW identify locations where suction dredge mining activity is occurring.

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

Existing regulations require that live rooted woody vegetation and any large embedded woody material cannot be disturbed. There are no changes to these regulations associated with the proposal.

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

One known invasive species in the vicinity of suction dredging activity is on the Sultan River, which contains significant presence of the diatom *Didymosphenia* sp. This species is not listed as an aquatic invasive species in state rules.

5. Animals

There are minor changes in the effects to animals associated with the inclusion of provisions relating to aquatic invasive species in the proposal; see item e, below. The inclusion of provisions for dryland dredging does not imply an anticipated increase in this activity, only a re-definition of where the activity is regulated. No changes to effects of mineral prospecting or suction dredging are anticipated from the new distinction for dryland dredging in the proposal.

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:

mammals: deer, bear, elk, beaver, other:

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

All of the above are present near waters where suction dredging occurs, and some will likely be present during projects authorized by these rules. In addition, any other freshwater fish species present in Washington state streams may be present at project locations. There are no changes in the location or amount of suction dredging activity anticipated in association with the proposal.

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

Currently federally listed fish species that could reside in or migrate through waters where suction dredging occurs include bull trout, steelhead, chinook salmon, coho salmon, sockeye salmon, green sturgeon, and eulachon. There are no changes in the location of suction dredging activity or proximity to threatened and endangered species associated with the proposal.

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

Yes. Various runs of fish species use many waters of the state as migration routes. Salmon, steelhead, anadromous and resident cutthroat trout, bull trout, and other species migrate before and during spawning season. Juvenile fish migrate down these same streams on their way to saltwater or other freshwater areas. Various wildlife use stream corridors for migration routes. There are no changes in the location of suction dredging activity or proximity to migrating species anticipated in association with the proposal.

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

The hydraulic code is limited to ensuring protection of fish life. There is only one change associated with this proposal that affects fish life protection - provisions that help prevent the spread of aquatic invasive species; see below.

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

New Zealand mud snails are known to occur in waters draining to Lower Columbia River, the Snohomish estuary (Smith Island/Union Slough), and Willapa Bay, and in Capitol Lake, the Kalama/Vancouver area, Lower Chehalis River, the artificial stream at the NOAA Manchester research site, in many Lake Washington tributaries, at the WDFW Ringold hatchery water intake, in Lake Wallula/Hanford Reach and Lake Umatilla on the Columbia River, in the Snake River at the mouth of Course Creek, and in an agricultural ditch near Stanwood in the Skagit River delta. Associated with the proposal are provisions designed to promote prevention of the spread of aquatic invasive species through the movement of suction dredge equipment into and around the state. These protections or preventative measures relating to aquatic invasive species will have minor-to-no effect on protection of fish life or impacts to other animals. Decontamination measures are already implemented voluntarily by most participants. Inspection requirements depend on further Aquatic Invasive Species Program development outside this rule making activity. Such development would increase awareness of the need for inspection, provide for inspection locations, increase awareness of the desire to prevent the spread of aquatic invasive species in Washington, and reinforce protocols for decontamination.

6. Energy and Natural Resources

There are no changes in energy and natural resources effects associated with the proposal.

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.

The completed project has no energy needs. Once mining is completed, no structures or equipment are left behind. Motorized rotating pans, vac-pacs, dredges and highbankers are powered by electric motors or internal combustion engines. All equipment is used directly in the collection or processing of aggregate for the discovery or recovery of gold. There is no anticipated change in energy use of suction dredging activity associated with the proposal.

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.

7. Environmental Health

There are no changes in the environmental health effects associated with the proposal.

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.

Yes. Internal combustion engines are used routinely for mineral prospecting. Engines operated without spark arresters might cause fires where dry vegetation is present. Careless use of fuels near hot equipment might be a fire or explosion danger. Fuel spills could occur, but because the equipment authorized by the rules is for small scale or noncommercial purposes, spills likely would be relatively small.

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

Prospectors report routinely encountering and collecting mercury and lead while conducting their operations. Mercury could be naturally-occurring or could be a legacy from historic mining practices. Most lead is collected in the form of lost fishing gear.

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

None.

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

Petroleum products for fueling and servicing transportation and engines for prospecting apparatus could be stored on the site. There is no change in storage or use of potentially toxic or hazardous substances associated with the proposal.

4) Describe special emergency services that might be required.

Fire response by municipal, state or federal agencies, depending on location. Hazardous spill response team by state and federal agencies. Medical response/evacuation services, depending on location and severity of injury. Search and rescue, for backcountry sites.

No changes to the emergency services that might be required are associated with this proposal.

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

Fueling and servicing is currently required to be done so that petroleum products do not get into the water. Fuel is required to be stored outside of the stream channel, and in the shade when possible. If fuel spills occur, prospectors are required to contact state emergency response authorities and cease activities. There are no changes in measures to control environmental health hazards associated with the proposal.

b. Noise

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

None

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.

Noise from small internal combustion engines and digging with hand tools results from mineral prospecting projects. Under existing regulations, dredges are restricted to operating in daylight hours, but equipment operated outside the wetted perimeter could operate 24 hours a day. Most operations occur during daylight hours only. Most operations last only a few days, although they might last for months or even year-round. There are no changes in noise effects associated with the proposal.

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

None; existing regulations limiting the hours of operation of equipment within the wetted perimeter has the effect of controlling noise impacts.

8. Land and Shoreline Use

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

Various. Much of the land prospectors use is public forest and rangeland managed by various federal or state agencies. Mineral prospecting can inhibit some other activities at the site, such as water recreation and fishing. No changes to these effects are associated with the proposal.

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?

Mineral prospecting occurs in and near water flowing through land used for all types of agriculture such as forestry, grazing, and cropland. These streams also supply water for agricultural and domestic uses. Work under the HPA rules does not affect adjacent long-term land use, and no changes are associated with the proposal.

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

No.

c. Describe any structures on the site.

None.

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

No.

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

Various, depending on jurisdiction where the activity is located. No changes to locations of mineral prospecting are anticipated associated with the proposal.

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

Various; the activity occurs in numerous jurisdictions statewide.

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

Various; see item e.

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

Varies by jurisdiction.

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

No change in number of people residing or working at project sites is associated with this proposal.

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:

None.

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

None.

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:

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?

n/a

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

n/a

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

n/a

11. Light and Glare

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

Existing regulations limiting the hours of operation of equipment within the wetted perimeter has the effect of controlling light and glare impacts. Operations in the wetted perimeter are limited to occurring from one-half hour before official sunrise to one-half hour after official sunset.

A small percentage of suction dredge projects conducted under existing mineral prospecting regulations might elect to process aggregate on uplands (outside the wetted perimeter) at night using artificial flood lighting. The impact would be minor and localized since most activities are small operations in remote areas. No changes to light or glare effects are associated with the proposal.

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

No.

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?

Activities in and adjacent to Washington streams include but are not limited to fishing, hiking, boating, bird watching, camping, fish watching, hunting, horseback riding, bicycling, motorcycling, and rockhounding. No changes to these uses are associated with the proposal.

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

Yes. The presence of internal combustion engines in some locations can be incompatible with some other uses of stream corridors. Some people engage in camping, wildlife viewing, boating and fishing, so they can enjoy the peace and solitude of the natural environment. Conflicts have and will arise among different users. Those pursuing activities for solitude likely will not return to locations where noisy equipment is being used. Access to streams may be partially blocked by prospectors and their equipment for varying lengths of time. Lines anchoring dredges may be a navigation hazard to boaters. No changes to these effects are associated with the proposal.

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

Dredging within the wetted perimeter is restricted to a particular season that varies according to the stream. Competing activities can occur outside these times without conflict. No changes to these times are associated with the proposal.

13. Historic and cultural preservation

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

Yes. Many current mining locations are associated with official or unofficial historic mining sites. Shorelines also attracted transportation corridors and community sites for tribes and settlers, and many of those locations could be eligible for or are listed in preservation registers. It is up to the prospector to pursue cultural resource concerns with the Washington State Office of Archaeology and Historic Preservation and local tribes. The proposal changes neither the likelihood of encountering cultural resources nor the obligation of the permittee to pursue cultural resource preservation with appropriate entities.

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.

Very likely; see item b, above.

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.

n/a

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.

The Gold and Fish pamphlet and individual HPA permit documents refer prospectors to the Department of Archaeology and Historic Preservation, which can inform them of the requirements for protecting sites of archeological or historical significance. The proposal

changes neither the likelihood of encountering cultural resources nor the obligation of the permittee to pursue cultural resource preservation with appropriate entities.

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.

Prospecting occurs in rural areas without direct connection to public streets.

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?

Varies; usually mineral prospecting locations are remote, accessed by unpaved forest roads, and are not served by public transportation. Exceptions could include sites along Highway 97 in Kittitas and Chelan Counties, Highway 2 in Snohomish and Chelan Counties, or Highway 12 in Yakima and Lewis Counties if those corridors are served by local bus service. No changes in transportation or accessibility effects are associated with the proposal.

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

None.

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

No.

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

No.

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

n/a

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.

No.

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.

D. Supplemental sheet for nonproject actions

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

No changes to discharge, emissions, toxic or hazardous substances or noise are associated with the proposal.

Proposed measures to avoid or reduce such increases are:

n/a

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

With the exception of the provisions for dryland dredging and aquatic invasive species mentioned in A.11 and B.5, above, this proposal only implements a change in the way suction dredging is permitted and a change in reporting requirements.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

There are no other changes to existing rules for fish life protection or to suction dredging effort, locations, typical equipment, or manner, so no other changes to effects on plants or animals are associated with the proposal.

3. How would the proposal be likely to deplete energy or natural resources?

No changes to energy or natural resource effects are associated with the proposal.

Proposed measures to protect or conserve energy and natural resources are:

n/a

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

No changes in effects to these resources are associated with the proposal.

Proposed measures to protect such resources or to avoid or reduce impacts are:

n/a

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

In some cases, activities allowed through existing mineral prospecting regulations may be in conflict with existing plans issued by other agencies. Nothing in the mineral prospecting regulations supersedes these plans. Additional actions and permits may be required by other agencies before prospecting operations can begin, and this is clearly

stated in the Gold and Fish pamphlet and in every individual mineral prospecting HPA permit.

No changes affecting land and shoreline use are associated with the proposal.

Proposed measures to avoid or reduce shoreline and land use impacts are:

n/a

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

n/a

Proposed measures to reduce or respond to such demand(s) are:

n/a

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

WDFW is the sole authority regulating hydraulic projects under Chapter 77.55 RCW, and the only state agency that regulates hydraulic projects solely for the protection of all fish life. The U.S. Army Corps of Engineers, Washington Department of Ecology, Washington Department of Natural Resources, Washington State Parks, local governments, and tribes also regulate certain aspects of hydraulic projects under their own authorities. National Marine Fisheries Service and U.S. Fish and Wildlife Service regulate the "take" of threatened or endangered species listed under the federal Endangered Species Act. Federal land managers, including U.S. Forest Service, National Parks Service, and Bureau of Land Management, regulate activities occurring on federal lands and have an interest in state hydraulic code regulations. Tribes regulate fisheries and certain aspects of construction projects on tribal lands. Each of these entities will be invited to comment on draft rules during the rulemaking process. Their comments and concerns will be carefully considered in rule change decisions.

In addition to the public comment and hearing process, WDFW is coordinating with federal and state agencies having an identified interest in, or regulatory authority for, projects regulated under WAC 220-660-300.