



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

December 17, 2010

Michael Haley, P.E.
Public Works Department
City of Redmond
15670 NE 85th Street, MS: INPW
PO Box 97010
Redmond, WA 98073

RE: Water Quality Certification Order #8111 for U.S. Army Corps of Engineers
Public Notice #NWS-2009-242, Bear Creek Rehabilitation Project, Wetlands and
Bear Creek, Redmond, King County, Washington

Dear Mr. Haley:

On March 11, 2009, City of Redmond submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the proposed Bear Creek Rehabilitation project.

On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.

If you have any questions, please contact Rebekah Padgett at (425) 649-7129. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,

Erik Stockdale
Northwest Regional Office
Shorelands and Environmental Assistance Program

ES:rrp:cja

Enclosure

By certified mail: 7010 1060 0000 7466 4110



cc: Jonathan Smith, U.S. Army Corps of Engineers
Jim Shannon, Anchor Environmental, LLC
Stewart Reinbold, Washington Department of Fish and Wildlife
Michael Grady, NOAA Fisheries

e-cc: Patrick McGraner, Ecology
Raman Iyer, Ecology
Loree' Randall, Ecology
Karen Walter, Muckleshoot Indian Tribe KWalter@muckleshoot.nsn.us
ecyrefedpermits@ecy.wa.gov

IN THE MATTER OF GRANTING A) ORDER #8111
WATER QUALITY) Corps Reference #NWS-2009-242
CERTIFICATION TO) Bear Creek Rehabilitation Project; Wetlands and
City of Redmond) Bear Creek, Redmond, King County,
in accordance with 33 U.S.C. 1341) Washington.
(FWPCA § 401), RCW 90.48.120, RCW)
90.48.260 and Chapter 173-201A WAC)

TO: Michael Haley, P.E.
Public Works Department
City of Redmond
15670 NE 85th Street, MS: 1NPW
PO Box 97010
Redmond, WA 98073

On March 11, 2009, City of Redmond submitted a Joint Aquatic Resources Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification. A joint public notice regarding the request was distributed by the U.S. Army Corps of Engineers (Corps) for the above-referenced project pursuant to the provisions of Chapter 173-225 WAC on August 11, 2010.

The creek rehabilitation project includes realignment and enhancement of the lower portion of Bear Creek and its floodplain. Approximately 0.3 acre of wetland will be excavated and 1,600 linear feet of Bear Creek will be partially filled to construct 3,340 linear feet of new, meandering Bear Creek Stream channel with fish habitat features including pools, 3,000 linear feet of side channels of various depths, and woody debris. 1.25 acres of forested wetland will be created on the creek floodplain and 11.3 acres of stream buffer areas will be planted.

The project is located on Bear Creek Parkway, extending approximately 3,000 feet upstream from the mouth of Bear Creek, Redmond, King County, Washington, in wetlands and Bear Creek, Sections 11 and 12, T. 25N, R.5E, WRIA 8.

AUTHORITIES:

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §§ 1311, 1312, 1313, 1316, and 1317 (FWPCA §§ 301, 303, 306 and 307);
2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. § 1313 and by Chapter 90.48 RCW, and with other applicable state laws; and

3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS:

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will not violate applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. § 1341, RCW 90.48.120, RCW 90.48.260 Chapter 173-200 WAC and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments occurring as a result of project construction or operations.

A. General Conditions:

- A1. For purposes of this Order, the term "Applicant" shall mean City of Redmond and its agents, assignees and contractors.
- A2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Northwest Regional Office, Attn: 401/CZM Federal Project Manager, 3190 160th Avenue SE, Bellevue, WA 98008-5452. Any submittals shall reference Order #8111 and Corps Reference #NWS-2009-242.
- A3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on March 11, 2009. The Applicant will be out of compliance with this Order and must reapply with an updated application if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.
- A4. Within 30 days of receipt of an updated JARPA, Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.
- A5. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue an individual Section 404 permit.
- A6. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.

- A7. The Applicant shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
- A8. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (e.g., violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.
- A9. The Applicant shall ensure that all appropriate project engineers and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology a signed statement (see Attachment A for an example) from each project engineer and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins at the project or mitigation sites.
- A10. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.
- A11. Failure of any person or entity to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.
- B. Wetland Compensatory Mitigation:**
- B1. The Applicant shall mitigate wetland impacts as described in the *Bear Creek Rehabilitation Project Addendum to: Critical Areas Report for Bear Creek Rehabilitation Project (DEA, January 2009)*, (hereafter called the "Mitigation Plan") prepared by David Evans and Associates, and dated December 2, 2010 or as modified by this Order or revised and approved by Ecology.
- B2. The Applicant shall submit any changes to the Mitigation Plan in writing to Ecology (see A2) for review and approval before work begins.
- B3. The Applicant shall get review and written approval from Ecology of any plan changes required if problems arise during construction and planting of the wetland mitigation site.
- B4. The Applicant shall have a wetland professional at the wetland mitigation site during construction and planting.

Implementation

- B5. Unless otherwise approved by Ecology in writing, the Applicant shall begin the compensatory mitigation project before, or concurrent with, impacting wetlands or Ecology may require additional compensation to account for additional temporal loss of wetland functions.
- B6. If the mitigation site(s) cannot be completed within 13 months of the date of this Order, the Applicant shall inform Ecology, in writing, of the status of
- a) Bear Creek Rehabilitation Project (Tax Parcels 9 & 10 of Redmond Town Center).
 - b) Bear Creek Rehabilitation Project (Tax Parcels 9 & 10 of Redmond Town Center.
- With the:
- c) Reason for the delay.
 - d) Expected date of completion.

The Applicant shall submit an updated written notification every 12 months thereafter until the Bear Creek Rehabilitation Project is complete.

- B7. The Applicant shall ensure that all excess excavated site material is disposed of in an appropriate location outside of wetlands and their buffers at the wetland mitigation site and above the 100-year floodplain or as per the mitigation plan.
- B8. The Applicant shall ensure that no material is stockpiled within existing wetlands and their buffers at the wetland mitigation site(s) at any time, unless provided for in the Ecology-approved Mitigation Plan.
- B9. The Applicant shall ensure that no construction debris is deposited within existing wetland and their buffers at the wetland mitigation site(s) at any time, unless provided for in the Ecology approved Mitigation Plan.
- B10. The Applicant shall not use Polyacrylamide on exposed or disturbed soil at the mitigation site(s).
- B11. The Applicant shall not use hay or straw on exposed or disturbed soil at the mitigation site(s).
- B12. If seeding is used at the wetland mitigation site, the seed mix must contain native, non-invasive plant species.
- B13. The Applicant shall place signs at the mitigation area's boundaries, including buffers, every 150 feet (minimum) to mark the area as Native Growth Protection Area (NGPA) wetland mitigation site.
- B14. Upon completion of site-grading and prior to planting, the Applicant shall submit to Ecology written confirmation that the finished grades are consistent with the approved

Mitigation Plan or subsequent Ecology-approved plan changes. Written confirmation can be in the form of a signed letter from the surveyor or project engineer indicating how final elevations were confirmed and whether those elevations are consistent with the Mitigation Plan.

- B15. Within 90 days of completing construction and planting of the mitigation site(s), the Applicant shall submit to Ecology (see A2) one hard copy and one electronic file of the final as-built report including maps. The as-built report must:
- a) Document site conditions at Year Zero.
 - b) Include the information listed in Attachment B (Information Required for As-built Reports).
 - c) Include documentation of the recorded legal mechanism required in Condition B16 conservation easement.
- B16. Within 90 days of the date the Order was issued, the Applicant shall record a conservation easement for Bear Creek Rehabilitation Project, a copy of this Order, and a site map indicating the location of mitigation site and their buffers. These documents must be recorded with the County Recording Office, Registrar of Deeds, or other official responsible for maintaining records for, or interest in, real property.

Monitoring and Maintenance

- B17. The Applicant shall water and maintain all mitigation site plantings so as to meet the Mitigation Plan's performance standards as described on Table 2 in 5.0 Maintenance Plan (EXH 11E).
- B18. The Applicant shall monitor the mitigation site for a minimum of 10 years. The Applicant shall use the monitoring methods described on page(s) EXH 11C & EXH 11D of 4.0 (Monitoring Plan) of the Mitigation Plan.
- B19. The Applicant shall submit to Ecology (see A2) one hard and one electronic copy of monitoring reports documenting mitigation site conditions for years 1, 2, 3, 5, 7, and 10. At a minimum, the reports must contain the information in Attachment C (Information Required for Monitoring Reports). The Applicant shall submit the first monitoring report 12 months after completing the mitigation site construction and planting.
- B20. The Applicant shall design and implement contingency measures if the Mitigation Plan's goals, objectives, or performance standards are not being met.
- B21. Prior to implementing contingency measures not specified in the Mitigation Plan, the Applicant shall consult with and obtain written approval from Ecology for the changes.

- B22. When necessary to meet the performance standards, the Applicant shall replace dead or dying plants with the same species, or an appropriate native plant alternative, during the first available planting season and note species, numbers, and approximate locations of all replacement plants in the subsequent monitoring report.
- B23. For monitoring years five (5) and ten (10) the Applicant shall use the 1997 or updated versions of the "Washington State Wetlands Identification and Delineation Manual" to delineate all compensatory wetlands and include delineation information (e.g. data sheets, maps, etc.) in the monitoring reports.
- B24. At the end of the monitoring period, the Applicant shall use the August 2004 or updated version of "Washington State Wetlands Rating System for Western Washington" to rate all wetlands (except those that have been preserved) and include the information in the monitoring report.
- B25. If the Applicant has not met all conditions and performance standards for the mitigation site at the end of the monitoring period, Ecology may require additional monitoring, additional mitigation, or both.
- B26. Until the Applicant has received written notice from Ecology that the Mitigation Plan has been fully implemented, the Applicant's obligation under Condition B1 to mitigate for wetland impacts is not met.

C. Water Quality Conditions:

- C1. Bear Creek is classified as "salmonid spawning, rearing, and migration" and the criteria of that class apply except as specifically modified by this Order. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-200(1)(e)(i).
- C2. In-Water Construction Water Quality Sampling and Monitoring: A Water Quality Protection and Monitoring Plan (Plan) shall be developed and implemented. "In-water construction" is defined as all work below the ordinary high water mark of Bear Creek and Sammamish River.

The Plan shall include the following minimum requirements:

- a. Locations of samples: Locations of water quality sampling sites shall be identified and described in the Plan and on a map of the project area. At a minimum, sampling shall take place at the point of compliance as specified in WAC 173-201A-200(1)(e)(i), which allows a 100-foot temporary area of mixing for turbidity resulting from disturbance of in-place sediments in Bear Creek, and a 300-foot temporary area of mixing for turbidity in Sammamish River.

Background samples shall be collected outside the area of influence of the in-water work. Background samples shall be collected at the same frequency as the point of compliance samples.

- b. Number of samples: Number and frequency of water quality samples to be taken.
- c. Parameter to be sampled: Turbidity shall be sampled for this project.
- d. Equipment: Sampling for turbidity is to be accomplished using a turbidometer properly calibrated according to the operator's manual.
- e. Best Management Practices (BMPs): A description of the BMPs that will be used during construction to protect water quality.
- f. Detection of exceedances: Water quality standards for turbidity in "salmonid spawning, rearing, and migration" waters are as follows: turbidity shall not exceed 5 NTU over background conditions when the background is 50 NTU or less, or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. If exceedances of this standard at the point of compliance specified in WAC 173-201A-200(1)(e)(i) is detected through water quality sampling and monitoring, the Applicant shall immediately take action to stop, contain, and prevent unauthorized discharges or otherwise stop the violation and correct the problem. After such an event, the Applicant shall assess the efficacy of the site BMPs and update or improve the BMPs used at the work site in an effort to reduce or prevent recurrence of the turbidity exceedance.
- g. Reporting: If no exceedances are detected, results of water quality sampling, as determined by the Plan, shall be forwarded to Ecology on a monthly basis in accordance to Condition A2.
- h. Notification of exceedances: Notification of exceedances that are detected through water quality sampling shall be made to Ecology within 24 hours of occurrence. Notification shall be made with reference to Order #8111, Attn: 401/CZM Federal Project Manager, by telephone at (425) 649-7129 or (425) 649-7000, or by fax to (425) 649-7098. The Applicant shall, at a minimum, provide Ecology with the following information:
 - i. A description of the nature and cause of exceedance.
 - ii. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the Applicant will return to compliance.
 - iii. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the non-compliance.

- iv. In addition, within five (5) days after notification of an exceedance, the Applicant shall submit a written report to Ecology that describes the nature of the exceedance, turbidity results and location, photographs, and any other pertinent information.

D. Conditions for Construction Activities:

General Conditions:

- D1. Applicant shall obtain and comply with a Construction Stormwater General Permit for this project.
- D2. Construction stormwater, sediment, and erosion control best management practices (BMPs; e.g., filter fences, etc.) suitable to prevent exceedances of state water quality standards shall be in place before starting construction at the site.
- D3. Sediment and erosion control measures shall be inspected and maintained prior to and during project implementation.
- D4. All construction debris shall be properly disposed of in a manner to prevent it from entering waters of the state.
- D5. Machinery and equipment used during construction shall be serviced, fueled, and maintained upland, unless otherwise approved by Ecology, in order to prevent contamination to any surface water.
- D6. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall be contained for proper disposal, and shall not be discharged into state waters or storm drains.
- D7. Clean Fill Criteria: Applicant shall ensure that fill (soil) placed for the proposed project does not contain toxic materials in toxic amounts.
- D8. Work in or near the water that may affect fish migration, spawning, or rearing shall cease immediately upon a determination by Ecology that fisheries resources may be adversely affected.
- D9. All manmade debris that has been deposited below the Ordinary High Water Line within the construction work area shall be removed and disposed of upland such that it does not enter waters of the state. Concrete rubble, metal debris, and other debris in the construction work corridor that have washed into marine areas shall be removed from the project area.
- D10. Asphalt shall be prevented from entering waters of the state.

D11. Native riparian vegetation shall be left in place along the shoreline to the extent practicable.

E. Emergency/Contingency Measures:

E1. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project.

E2. The Applicant shall have adequate and appropriate spill response materials on hand to respond to emergency release of petroleum products or any other material into waters of the state.

E3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters.

E4. Any work that is out of compliance with the provisions of this Order, or conditions causing distressed or dying fish, or any discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, is prohibited. If these occur, the Applicant shall immediately take the following actions:

- a. Cease operations at the location of the violation or spill.
- b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
- c. Notify Ecology of the failure to comply. All oil spills shall be reported immediately to Ecology's 24-Hour Spill Response Team at 1-800-258-5990, **and** within 24 hours of spills or other events to Ecology's 401/CZM Federal Project Manager at (425) 649-7129 or (425) 649-7000.
- d. Submit a detailed written report to Ecology within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

Compliance with this condition does not relieve the Applicant from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

F. Timing Requirements

F1. This Order is valid until all compliance requirements in this document have been met.

G. Reporting and Notification Requirement Conditions

- G1. The Applicant shall provide to Ecology's 401/CZM Federal Permit Manager a copy of the final Corps permit within 2 weeks of receipt of the permit. A copy shall be submitted per condition A2 above.
- G2. Applicant shall provide notice to Ecology's 401/CZM Federal Project Manager at least three (3) days prior to the start of construction and within 14 days after completion of construction at the project site. The Applicant shall also provide Ecology notice within 30 days after completing each site of the wetland mitigation project. Notification, referencing Corps Reference #NWS-2009-242, Order #8111 can take place by telephone to (425) 649-7129 or (425) 649-7000, fax to (425) 649-7098, or in writing.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Rd SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

CONTACT INFORMATION

Please direct all questions about this Order to:

Rebekah Padgett
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008
(425) 649-7129
rpad461@ecy.wa.gov

MORE INFORMATION

Pollution Control Hearings Board Website
www.eho.wa.gov/Boards_PCHB.aspx

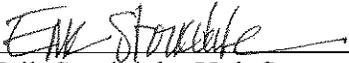
Chapter 43.21B RCW - Environmental Hearings Office – Pollution Control Hearings Board
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>

Chapter 371-08 WAC – Practice And Procedure
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>

Chapter 90.48 RCW – Water Pollution Control
<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>

Chapter 173-201A WAC – Water Quality Standards for Surface Waters of the State of Washington
www.ecy.wa.gov/biblio/wac173201A.html

SIGNATURE



Erik Stockdale, Unit Supervisor
Wetlands/401 Unit
Shorelands and Environmental Assistance Program
Northwest Regional Office

December 17, 2010

ATTACHMENT A

**CITY OF REDMOND
BEAR CREEK REHABILITATION PROJECT
Water Quality Certification Order #8111**

**Statement of Understanding of
Water Quality Certification Conditions**

I have read and understand the conditions of Order #8111 Section 401 Water Quality Certification for the City of Redmond Bear Creek Rehabilitation Project. I have also read and understand all permits, plans, documents, and approvals associated with the project referenced in this Order.

Signature

Date

Title

Company

Attachment B
Information for As-built Reports
(See Condition B15)

CITY OF REDMOND
BEAR CREEK REHABILITATION PROJECT
Water Quality Certification Order #8111

Corps Reference #NWS-2009-242

Background Information

- 1) Project name.
- 2) Ecology docket number and the Corps reference number.
- 3) Name and contact information for the parties responsible for the mitigation site including:
 - a) The applicant.
 - b) The landowner.
 - c) Wetland professional on site during construction of the compensatory mitigation site.
- 4) Name and contact information for the party responsible for preparing the report.
- 5) Who the report was prepared for (name, address, and phone number) *{if different from number 3 above.}*
- 6) Month and year the report was produced.

The Development Site

- 7) Brief description of the development project. Include:
 - a) Directions to the site.
 - b) Month and year construction of the development project started and ended.
 - c) Area (acres) and type(s) (rating category, HGM classification, and Cowardin classification) of wetlands that were **actually** impacted by the development project, including temporary impacts.

The Compensatory Mitigation Project

- 8) Brief description of the **final** compensatory mitigation project with any changes from the approved plan made during construction. Include:
 - a) Directions to the site.
 - b) Who completed the compensatory mitigation project (name, address, and phone number).
 - c) Acreage and type(s) (re-establishment, rehabilitation, creation, enhancement, and preservation) of mitigation authorized to compensate for wetland impacts.
 - d) Important dates including:
 - i. Month and year the wetland impacts occurred.
 - ii. When work on the compensatory mitigation site began and ended.

- iii. When different activities began and ended such as grading, removal of invasive plants, installing plants, and installing habitat features.
- 9) Description of any problems encountered and solutions implemented (with reasons for changes) during construction of the compensatory mitigation site.
- 10) Any changes to the goals, objectives, and performance standards of the compensatory mitigation project.
- 11) List of any follow-up actions needed, with a schedule.
- 12) Final site maps (8 1/2" x 11" or larger) of the compensatory mitigation site(s) including the following (at a minimum).
 - a) Geographic location of the site with landmarks;
 - b) Clear delineation of the project perimeter(s);
 - c) Topography (with a description of how elevations were determined);
 - d) Installed planting scheme (quantities, densities, sizes, and approximate locations of plants, as well as the source(s) of plant material);
 - e) Location of habitat features;
 - f) Location of permanent photo stations.The final site maps should reflect on-the-ground conditions after the site work is completed. Include the month and year when the maps were produced and, if applicable, when information was collected.
- 13) Photographs of the site at as-built conditions taken from permanent photo stations. We recommend photo pans.
- 14) Copies of any records of deed notification or conservation easements.

Attachment C
Required Information for Monitoring Reports
(See Condition B19)

CITY OF REDMOND
BEAR CREEK REHABILITATION PROJECT
Water Quality Certification Order #8111

Corps Reference #NWS-2009-242

Ecology requires the following information, for monitoring reports submitted under this Order. Ecology will accept additional information that may be required by other regulators.

Background Information

- 1) Project name
- 2) Ecology docket number and Corps reference number
- 3) Name and contact information of the parties responsible for the mitigation site including:
 - a) The applicant
 - b) The landowner
- 4) Name and contact information for the party responsible for the monitoring activities and report
- 5) Who the report was prepared for (name, address, and phone number) *{if different from number 3 above.}*
- 6) Month and year the monitoring data were collected
- 7) Month and year the report was produced

Mitigation Project Information

- 8) Brief description of the mitigation project including:
 - a) Directions to the site
 - b) Acreage and type(s) (re-establishment, rehabilitation, creation, enhancement, and preservation) of mitigation authorized to compensate for wetland impacts
- 9) Brief description of monitoring approach and methods.
- 10) A list of the goals and objectives for the mitigation project
- 11) Summary table of monitoring data compared with performance standards. Using the monitoring data, describe how the site is developing toward goals and objectives and whether the project is in compliance with performance standards
- 12) Summary (including dates) of management actions (maintenance, contingencies, and corrective actions) implemented at the site(s)
- 13) Summary of any difficulties or significant events that occurred on the site that may affect the ultimate success of the project
- 14) Specific recommendations for any additional corrective actions or adaptive management with a time table

- 15) Summary of any lessons learned
- 16) Site maps (8 1/2" x 11" or larger) of the compensatory mitigation site(s) including the following (at a minimum):
 - a) The month and year when the maps were produced and, if applicable, when information was collected
 - b) The geographic location of the site with landmarks.
 - c) Clear delineation of the project perimeter(s).
 - d) Species, numbers, and approximate locations of all replanted material vegetation.
 - e) Location of habitat features.
 - f) Location of permanent photo stations and location of any other photos.
 - g) Location of sampling points or transects.
- 17) Photographs taken at permanent photo stations (and other photographs as needed) from the most recent monitoring visit, which are dated and clearly indicate the direction from which the photo was taken. We recommend photo pans.