

**Department of State Lands  
Public Review Draft  
August 31, 2011  
Tracked Changes**

**ADMINISTRATIVE RULES GOVERNING THE ISSUANCE AND ENFORCEMENT  
OF GENERAL PERMITS WITHIN WATERS  
OF THIS STATE**

**141-093-0107**

**Completeness and Eligibility Review for Authorizing Projects under a GP**

(1) **Initial Review.** The Department will review the application within 15 calendar days (unless otherwise stated in the administrative rules for a specific GP), of agency receipt of the application to determine whether the application is complete and the project is eligible for a GP.

(a) **Complete and Eligible Application.** A complete application is one that contains all the information required in the Department's application. An eligible project is one that meets the eligibility requirements, activity-specific application requirements and authorized activities listed under the GP.

(b) **Incomplete Application Notification.** If the Department determines that the application is incomplete or deficient, the Department will notify the applicant in writing and list the missing or deficient information. The applicant may resubmit the entire amended package for reconsideration within 120 calendar days from date of the Department's notice, unless instructed by the Department to do otherwise. Submission of a new or amended application package starts a new ~~15-calendar day~~ initial review period.

(c) **Ineligible Projects.** If the review of the application results in a determination that the project is ineligible for a GP, the applicant will be notified and informed of the reason for ineligibility. The applicant may then either revise the project and resubmit the application for reconsideration or apply for an Individual Permit under OAR 141-085 within 120 calendar days from date of agency determination.

(2) **Timeframe for Resubmittal.** If a revised application is not resubmitted within 120 calendar days of an incompleteness or ineligibility determination, the Department may administratively close the application. If the Department closes the file under this circumstance, the Department will retain the application fee. A subsequent application for the same or similar project will require payment of an application fee.

141-093-0115

## Department Determinations and Considerations in Evaluating Applications to Authorize Projects under a GP

(1) **Departmental Final Review.** The Department will evaluate the information provided in the application, conduct its own investigation, and consider the comments submitted during the public review process to determine whether or not to issue an authorization under a GP. The Department will render a decision within 40 calendar days of receipt of a complete application, unless otherwise stated in the administrative rules for a specific GP.

(2) **Extension of Decision Deadline.** The applicant may request additional time to respond to comments or to satisfy other requirements. The applicant and the Department may agree to extend the timeline for making a final authorization decision ~~beyond the 40 calendar days following receipt of a complete application.~~ If no agreement is reached, the Department will make a final authorization decision within the original ~~40-day~~ time period specified in these rules.

(3) **Effective Date of Review Standards.** The Department may consider only standards and criteria in effect on the date the Department receives the complete application or renewal request.

(4) **Department Determinations.** The Department will issue an authorization under a GP if it determines the project described in the application:

(a) Has independent utility;

(b) Is consistent with the protection, conservation and best use of the water resources of this state as specified in ORS 196.600 through 196.990;

(c) Would not unreasonably interfere with the paramount policy of this state to preserve the use of its waters for navigation, fishing and public recreation, when project is on state-owned lands; and

(d) Meets the purpose and eligibility requirements in the GP.

(5) **Department Considerations.** In determining whether to issue an authorization under a GP, the Department will consider all of the following:

(a) The public need for the proposed fill or removal and the social, economic and other public benefits likely to result from the proposed fill or removal. When the applicant for

an authorization under a GP is a public body, the Department may accept and rely on the public body's findings as to local public need and local public benefit;

- (b) The economic cost to the public if the proposed fill or removal is not accomplished;
- (c) The availability of alternatives to the project for which the fill or removal is proposed;
- (d) The availability of alternative sites for the proposed fill or removal;
- (e) Whether the proposed fill or removal conforms to sound policies of conservation and would not interfere with public health and safety;
- (f) Whether the proposed fill or removal is in conformance with existing public uses of the waters and with uses designated for adjacent land in an acknowledged comprehensive plan and land use regulations;
- (g) Whether the proposed fill or removal is compatible with the acknowledged comprehensive plan and land use regulations for the area where the proposed fill or removal is to take place or can be conditioned on a future local approval to meet this criterion;
- (h) Whether the proposed fill or removal is for stream bank protection; and
- (i) Whether the applicant has provided all practicable mitigation to reduce the adverse effects of the proposed fill or removal in the manner set forth in ORS 196.800.

(6) **Alternatives Analysis.** The applicant bears the burden of providing the Department with the alternatives analysis used to derive the practicable alternative that has the least reasonably expected adverse impacts on waters of this state. The alternatives analysis must provide the Department all the underlying information necessary to support its considerations under section (5) of this rule.

(7) **Fills in an Estuary for Non-Water Dependent Use.** A "substantial fill" in an estuary is any amount of fill regulated by the Department. No authorizations will be issued for a substantial fill in an estuary for a non-water dependent use unless all of the following apply:

- (a) The fill is for a public use;
- (b) The fill satisfies a public need that outweighs the harm, if any, to navigation, fisheries and recreation; and
- (c) The removal-fill meets all other review standards.

(8) **Written Findings.** In the following cases, the Department will prepare written findings to document a decision for an authorization under a GP:

- (a) Permit denial;
- (b) Fill of two acres or more in wetlands;
- (c) Fill in estuaries (except cable crossings, pipelines, or bridge construction);
- (d) Removal from estuaries of more than 10,000 cubic yards of material (except for maintenance dredging);
- (e) Placement of greater than 2,500 cubic yards of riprap in coastal streams or estuaries;
- (f) Removal-fill in the Oregon Territorial Sea in accordance with Statewide Planning Goal 19-Ocean Resources; and
- (g) Any permit decision that is contrary to the final decision recommendation of a state agency.

(9) **Marine Reserves and Marine Protected Areas.** The Department will only authorize a removal-fill activity within an area designated by the State Land Board as a marine reserve or a marine protected area if the removal-fill activity is necessary to study, monitor, evaluate, enforce, protect or otherwise further the studying, monitoring, enforcement and protection of the reserve or marine protected area.

**141-093-0135**

### **General Conditions**

- (1) **Responsible Party.** The person listed on the application as the applicant is responsible for the activities of all contractors or other operators involved in project work covered by the authorization under the GP.
- (2) **Copy of Authorization Available for Inspection.** A copy of the authorization must be available at the work site whenever authorized activities are being conducted.
- (3) **Site Access Required.** Employees of the Department and all authorized representatives must be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this authorization.
- (4) **Archeological Resources.** If any archeological sites, resources or artifacts are discovered during construction, work must immediately cease and the State Historic Preservation Office must be contacted.

(5) **ODFW Fish Passage Requirement.** The authorized activity must meet Oregon Department of Fish and Wildlife requirements for fish passage before commencing the project (ORS 509.580 through 509.901 and OAR 635-412-0005 through 635-412-0040).

(6) **Hazards to Recreation, Navigation or Fishing.** The activity must be timed not to interfere with or create a hazard to recreational or commercial navigation or fishing.

(7) **Work Period in Jurisdictional Areas.** Fill or removal activities below the Ordinary High Water Line must be conducted when recommended by ODFW, unless otherwise coordinated with Oregon Department of Fish and Wildlife and approved in writing by DSL. Work is prohibited when fish eggs are present within the reach where the authorized activities are being conducted.

(8) **Pre-Construction Resource Area Fencing or Flagging.** Prior to any site grading, the boundaries of any avoided wetlands, waterways and riparian areas adjacent to the project site must be surrounded by noticeable construction fencing or flagging. There will be no vegetation removal or heavy equipment within marked areas. The marked areas must be maintained during construction of the project and be removed immediately upon project completion.

(9) **Erosion Control Methods.** The following erosion control measures must be installed at the construction site before construction and maintained during and after construction to prevent erosion and minimize movement of soil into waters of this state:

(a) All exposed soils must be stabilized during and after construction in order to prevent erosion and sedimentation;

(b) Filter bags, sediment fences, sediment traps or catch basins, leave strips or berms, or other measures must be used to prevent movement of soil into waterways and wetlands;

(c) To prevent erosion, use of compost berms, impervious materials or other equally effective methods, must be used to protect soil stockpiled during rain events or when the stockpile site is not moved or reshaped for more than 48 hours;

(d) Unless part of the permanent fill, all construction access points through, and staging areas in, riparian and wetland areas must use removable pads or mats to prevent soil compaction. However, in some wetland areas under dry summer conditions, this requirement may be waived upon approval by DSL. At project completion, disturbed areas with soil exposed by construction activities must be stabilized by mulching and native vegetative plantings or seeding. Sterile grass may be used instead of native vegetation for temporary sediment control if native vegetation is unavailable. If soils are

to remain exposed for more than seven days after completion of the permitted work, they must be covered with erosion control pads, mats or similar erosion control devices until vegetative stabilization is installed;

(e) Where vegetation is used for erosion control on slopes steeper than 2:1, tackified seed mulch must be used so the seed does not wash away before germination and rooting;

(f) Dredged or other excavated material must be placed on upland areas having stable slopes and must be prevented from eroding back into waterways and wetlands;

(g) Erosion control measures must be inspected and maintained as necessary to ensure their continued effectiveness until soils become stabilized; and

(h) All erosion control structures must be removed when the project is complete and soils are stabilized and vegetated.

(10) **Hazardous, Toxic, and Waste Material Handling.** Petroleum products, chemicals, fresh cement, sandblasted material and chipped paint, wood treated with leachable preservatives or other deleterious waste materials must not be allowed to enter waters of this state. Machinery refueling is to occur at least 150 feet from waters of this state and confined in a designated area to prevent spillage into waters of this state. Barges must have a containment system to effectively prevent petroleum products or other deleterious material from entering waters of this state. Project-related spills into waters of this state or onto land with a potential to enter waters of this state must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.

(11) **Raising or Redirecting Water.** The project must not cause water to rise or be redirected and result in damage to structures or property.

~~(12) **Wetlands of Conservation Concern.** The project must not involve impacts to wetlands identified as a wetland type of conservation concern. Wetlands of Conservation Concern are bogs, fens, playas, salt flats, alkaline lakes, hot springs, native wet prairies, vernal pools, inter-dunal wetlands, mature forested wetlands, ultramafic soil wetlands, wooded tidal wetlands, and un-diked tidal wetlands, as determined by the Department.~~

(12) **Waste Disposal.** Old piling and other waste material generated by the project must be disposed of in an appropriate disposal facility. There must be no temporary storage of piling or other waste material below top of bank, in wetlands; in a Federal Emergency Management Administration designated floodway, or in an area historically subject to landslides.

(13) **DSL May Halt or Modify.** DSL retains the authority to temporarily halt or modify the project in case of unforeseen damage to natural resources.

(14~~5~~) **Work Area Isolation.** The work area must be isolated from the water during construction. All structures and materials used to isolate the work area must be removed immediately following construction and water flow returned to pre-construction conditions. All fish must be salvaged from the isolated area in accordance with Oregon Department of Fish and Wildlife requirements.

(15~~6~~) **Spoil Disposal.** Spoil materials, not authorized used in the project for placement in waters of this state, must be placed in an upland location. Spoil materials used in the project must be included in the cumulative removal-fill calculation for the activity.

(16~~7~~) **Additional Conditions.** The Department may impose additional conditions, if necessary, to eliminate and reduce the reasonably expected adverse impacts of project development to waters of this state. [OAR](#) 141-093-0135

**Department of State Lands  
Public Review Draft  
August 31, 2011  
New Sections 141-093-0180 Through 0215**

**State General Permit for Impacts to Vernal Pool Wetlands and  
Other Waters of the State in Jackson County, Oregon**

**141-093-0180**

**Purpose**

The purpose of this General Permit (GP) is to authorize impacts to vernal pool wetlands and incorporate a mitigation framework to satisfy federal Endangered Species Act (ESA) requirements administered by the U.S. Fish and Wildlife Service (USFWS) and federal Clean Water Act (CWA) requirements administered by the U.S. Army Corps of Engineers (Corps). The intent is to provide a faster permit process for similar activities with predictable effects that meet the requirements of the Removal-Fill Law, the CWA, and the ESA, while improving conservation of vernal pool wetlands and associated plant and animal species.

**141-093-0185**

**Expiration**

This general permit will expire on November 1, 2016 or when a combined total of 60 acres of vernal pool wetlands (up to 300 acres of vernal pool habitat complex) or other associated waters have been impacted, whichever occurs first. Upon expiration, the GP may be reviewed and modified or reissued.

#### **141-093-0187**

#### **Application and Final Review for Authorizing Projects under this GP**

The Department shall review application for this GP according to 141-093-0107 through 0115, with the following exceptions:

(1) **Initial Review.** The Department will review the application within 30 calendar days of agency receipt of the application to determine whether the application is complete and the project is eligible for this GP.

(2) **Departmental Final Review.** The Department will render a decision within 60 calendar days of receipt of a complete application.

#### **141-093-0190**

#### **Definitions**

The following definitions are used in this GP, in addition to those in OAR 141-085-0510.

(1) **“Combination Credits”** means those credits that have been approved by the Corps and the Department as wetland mitigation credits and by the USFWS as endangered species credits.

(2) **“Drought Year”** means a season in which precipitation prior to and during the growing season is less than the 30 percent probability level documented in the WETS table for the Medford weather station. The procedure for determining “below normal rainfall” is found in the 2006 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, available on the Department Web site.

(3) **“Permittee Responsible Mitigation”** means actions undertaken by a permittee to compensate for impacts resulting from a specific project.

(4) **“Protect and Manage Mitigation”** is preservation mitigation that entails the removal of a threat to, or preventing the decline of, aquatic resources. To meet the definition, the mitigation must also include the establishment and maintenance of native biological communities throughout the site to meet the performance standards.

(5) “**Restore and Manage Mitigation**” is mitigation which re-establishes vernal pool topography and hydrology, and native biological communities in areas where previously existing vernal pools have been altered to upland or open water. To meet the definition, the mitigation must also include the establishment and maintenance of native biological communities throughout the site to meet the performance standards.

(6) “**Steward**” means the party responsible for long-term management and monitoring of the mitigation site after it has been approved and closed by the Department.

(7) “**Vernal Pool**” means a seasonal wetland found on shallow soils over an impermeable hardpan layer or bedrock. In Jackson County, vernal pools and associated uplands are known to support several rare species.

(8) “**Vernal Pool Complex (VPC) and VPC Habitat**” means a tract of land that includes vernal pool wetlands, the upland mounds between them and within 100 feet from the edges of the vernal pools.

(9) “**Vernal Pool Function Ranking**” means the low, medium, or high quality category based on the average combined function scores reported for the 59 vernal pool complexes inventoried in the greater White City study area in 2007, appendix C-1 in the Agate Desert Vernal Pool Final Draft Function Assessment Methodology dated April 2007, found on the Department Web site. The average combined function score is 42 or less for low quality, between 43 and 69 for medium quality and 70 or more for high quality.

**141-093-0195**

### **Eligibility Requirements**

(1) **Project Location.** To be eligible for this GP, the project must be located within the geographic area of Agate-Winlo Soils. This area generally conforms to the boundaries of the Agate-Winlo soil map unit as mapped by the Natural Resources Conservation Service’s Jackson County soil survey.

(2) **Type of Water.** This GP authorizes removal-fill activities only in the following wetlands or other waters that occur in Agate-Winlo soils:

(a) Vernal pool wetlands;

(b) Ditches or other water conveyance structures constructed solely to drain vernal pool lands;

(c) Roadside ditches that are not part of a stream tributary system;

(d) Channels excavated through uplands for irrigation water and return flows; and

(e) Palustrine emergent wetlands that were historically vernal pool wetlands.

(3) **Thresholds.** To be eligible, a project must meet both of the following:

(a) Impacts to vernal pool wetlands and other waters must be less than two acres; and

(b) Impacts to VPC must be less than 15 acres.

(4) **Mitigation.** Mitigation must be accomplished in accordance with OAR 141-093-0200.

#### **141-093-0200**

#### **Mitigation**

(1) **General Requirements.** Mitigation may be accomplished by either permittee-responsible mitigation projects or by purchasing credits from an established mitigation bank. Mitigation must be conducted according to the following general requirements:

(a) Out-of-kind mitigation is not allowed for vernal pool impacts;

(b) All mitigation for impacts authorized by this GP must occur within a VPC or a historic VPC;

(c) All mitigation projects must meet the ratios, site suitability criteria, and performance standards and methods described in this section;

(d) Mitigation for vernal pool impacts must consist of either protect and manage or restore and manage, or both. Neither enhancement of existing wetland nor creation of wetlands where they did not previously occur is recognized as a suitable mitigation strategy for this GP;

(e) Combination credits may be used only once (for wetlands or listed species, or both); and

(f) The amount of mitigation required to offset impacts to waters of the state depends on both the mitigation site base ratios (based on the type of mitigation conducted) and by the impact site multipliers (based on the quality of the vernal pool site or other water being impacted), as described in this section.

(2) **Mitigation Site Base Ratios.** Mitigation site base ratios are used to determine the number of credits generated by each type of mitigation, as follows:

(a) Protect and manage will generate credits at a 1.5:1 ratio. This means that 1.5 acres of wetland protected generates 1 wetland credit or 1 combination credit; and

(b) Restore and manage will generate credits at a 1:1 ratio. This means that 1 acre of wetland restored generates 1 wetland credit or 1 combination credit.

(3) **Impact Site Multiplier.** The impact site multiplier is based on the quality of the vernal pools proposed for impact as defined below. This multiplier determines the number of credits that must be purchased from a bank or generated at a permittee-responsible mitigation site to offset a particular impact to a wetland or other water.

(a) For impacts to low quality vernal pool wetlands, the multiplier is 2. "Low quality" means impact sites that meet both of the following:

(A) The vernal pool function ranking is in lowest 30th percentile; and

(B) The total impact for the project is less than 0.5 acre of vernal pool wetland.

(b) For impacts to medium quality vernal pool wetlands, the multiplier is 2.5. "Medium quality" means impact sites that meet any one of the following;

(A) The vernal pool function ranking is in the lowest 30<sup>th</sup> percentile and the total impact for the project is more than 0.5 acre of vernal pool wetland;

(B) The vernal pool function ranking is between the 30<sup>th</sup> and 70<sup>th</sup> percentiles;

(C) The vernal pool wetland proposed for impact is within a designated critical habitat unit; or

(D) The vernal pool wetland proposed for impact is functionally contiguous with any VP complex of 10-30 acres.

(c) For impacts to high quality vernal pool wetlands, the multiplier is 3. "High quality" means impact sites that meet one of the following:

(A) The vernal pool function ranking is greater than the 70th percentile; or

(B) The vernal pool wetland proposed for impact is functionally contiguous with any VP complex >30 acres.

(d) For impacts to other waters as specified above, the multiplier is 2.5. No other quality assessment is required.

(4) **Mitigation Site Suitability Criteria.** All of the following criteria must be met for a mitigation site to qualify under this general permit:

(a) Size. The total effective size of a mitigation project must include at least 70 contiguous acres of VPC. Smaller parcels (10-70 acres) may be allowed if they are functionally contiguous to the larger sites described above. The Department may determine that smaller parcels (10-70 acres) of VPC may also be adequate in isolation if they exist within areas in which surrounding land uses are compatible with long-term VPC habitat conservation. Effective size means the Department will consider adjacent, permanently protected parcels dedicated to vernal pool conservation as part of the acreage total even if they are owned and managed by another party and have uninterrupted continuity of soils, water flows, and topography;

(b) Buffers. The mitigation project site must include sufficient area to maintain the hydrologic regime, soils, topography, and vegetative conditions providing suitable habitat for the typical suite of vernal pools species. The VPC to be restored or protected must include the surrounding upland mounds and adjacent areas that adequately buffer the VPC habitats against ecological edge effects and effects from adjacent land uses. Generally, uplands between wetlands (pools) and within 100 feet from the edges of the pools must be included under the same land protection measures as the associated vernal pools;

(c) Rare species. All VPC areas proposed for mitigation must demonstrate at least 10 percent occupancy by vernal pool fairy shrimp by the time the site is approved. Proposed management actions may include introduction of additional listed species or enhancement of current population levels;

(d) Functionality. All VPC areas proposed for mitigation must meet the 70th percentile ranking of the function assessment scores, or the applicant must demonstrate to the Department that sustainable restoration or management could raise the site to meet this threshold level of functionality;

(e) Hardpan. All mitigation project sites must have an intact hardpan layer. If the hardpan layer is perforated at the perimeter of the site, or if activities such as underground utility lines are anticipated that would perforate the hardpan, then the area of the mitigation site that is within 100 feet of the edge of the hardpan would generate 50 percent of the credits otherwise generated per OAR 141-093-0200(2). credits;

(f) Net gain. Mitigation projects proposed for lands that are already designated for conservation purposes must provide benefits to vernal pool habitats and species above and beyond those resulting from the current conservation status of the lands. For such cases, the number of credits generated will be determined by the Department;

(g) No adverse effects. Mitigation projects must be sited and managed in such a way that establishment and maintenance of the sites will not result in adverse effects to federally listed species or VPC habitats outside of the proposed mitigation area; and

(h) Multiple parcels. Mitigation projects may be composed of a single contiguous parcel of land or several geographically separate parcels provided each parcel satisfies the criteria described above.

## **141-093-0205**

### **Specific Application Requirements**

(1) **Wetland Delineation and Functional Assessments.** All applications for this GP must include a concurred wetland delineation and a functional assessment of the vernal pool wetlands at the impact and the permittee responsible mitigation sites. Functional assessments must be conducted according to the Agate Desert Vernal Pool Final Draft Function Assessment Methodology. ,

(2) **Rare Species Surveys.** All rare species surveys related to applications and mitigation for this GP must be conducted according to Guidance to Assist in the Assessment of, and Conservation Efforts for, Vernal Pool Systems on the Agate Desert, Jackson County, Oregon, dated June 2008, available on the Department Web site. These survey protocols must be followed to avoid harm to rare species when conducting surveys.

(3) **Compensatory Wetland Mitigation Plan.** All applications for this GP must include a compensatory wetland mitigation plan according to OAR 141-085-0700 through 0705, as applicable.

(4) **Long-Term Stewardship Plan.** Each mitigation project under this GP must include a plan describing long-term management of the site necessary to meet the goal of sustaining the aquatic resources and the wetland-dependent listed species. The plan must include:

(a) A long-term protection instrument consistent with OAR 141-085-0695. The uplands between vernal pools must be included under the same land protection instrument as the wetland areas;

(b) Identification of the long-term steward;

(c) A description of the long term management goals, as well as activities or treatments expected to reach and maintain those goals. It must include identification of long term management needs and annual cost estimates for these needs; and

(d) An ongoing funding mechanism, such as a non-wasting endowment, to pay for site management after the wetland regulatory monitoring period concludes.

## **141-093-0210**

## Authorized Activities

This GP authorizes a person to conduct removal-fill activities for projects that impact less than two acres of jurisdictional waters and conduct the required compensatory mitigation for those projects.

**141-093-0215**

## GP-Specific Conditions

(1) **General Conditions Apply.** All the conditions set forth in OAR 141-093--0135 apply to this GP, unless otherwise specified in this GP.

(2) **Long-Term Protection of Mitigation Sites Required.** The mitigation site shall be protected in perpetuity pursuant to OAR 141-085-0695, using an instrument approved by the Department. There must be no wetland impacts until the approved instrument is fully executed.

(3) **Post-Construction Report Required.** For restore and manage sites, a post-construction report demonstrating as-built conditions and discussing any variation from the approved plan must be provided to the Department within 90 days of mitigation site grading. The post-construction report must include:

(a) A scaled drawing, accurate to 6-inch elevation, showing the finished contours of the mitigation site;

(b) A narrative that describes any deviation from the approved mitigation plan; and

(c) A copy of the fully executed long-term protection instrument.

(4) **Term of Monitoring; Annual Monitoring Reports Required.** The permittee must monitor the mitigation site to determine whether the mitigation site is meeting performance standards for a minimum period of five growing seasons after establishment, and longer if necessary until the standards have been met for three consecutive non-drought years. Annual monitoring reports are required; however, if a drought year occurs within these timelines, that year may be deferred and the regular monitoring must resume the next non-drought year.

(5) **Annual Monitoring Report Due Date.** Annual monitoring reports are due by December 31<sup>st</sup>.

(6) **Extension of the Monitoring Period.** The monitoring period may be extended, at the discretion of the Department, for failure to provide monitoring reports, failure of the mitigation site to meet performance standards for three consecutive years (excepting

drought years) or when needed to evaluate re-planting or other corrective or remedial actions.

(7) **Release of Mitigation Obligation:** Mitigation monitoring is required until the Department has officially released the site from further monitoring.

(8) **Failure to Submit Monitoring Reports.** Failure to submit the required monitoring report by the due date may result in an extension of the monitoring period, forfeiture of the financial security and/or enforcement action.

(9) **Contents of the Annual Monitoring Report.** The annual monitoring report must include the following information:

(a) Completed Monitoring Report Cover Sheet, which includes permit number, permit holder name, monitoring date, report year, performance standards, and a determination of whether the site is meeting performance standards;

(b) Impact and mitigation site location map(s);

(c) A brief narrative that describes maintenance activities conducted and recommendations for future management to sustain performance standards;

(d) Mitigation site map showing permanent plot locations that correspond to the data collected and fixed photo-points;

(e) Data collected to support the conclusions related to the status of the site relative to all the performance standards listed in this permit (include summary/analysis in the report and raw data in the appendix);

(f) Photos from fixed photo points (include in the appendix);

(g) Other information necessary to document compliance with the performance standards listed in this permit;

(h) A post-construction functional assessment by the end of the monitoring period; and

(i) For restore and manage projects, a delineation must be conducted one time within the first five years, during spring of a year with normal precipitation patterns.

(10) **Corrective Action May be Required.** The Department retains the authority to require corrective action in the event the performance standards are not accomplished at any time within the monitoring period.

(11) **Performance Standards.** All mitigation projects must meet the performance standards in this section unless the Department, after coordination with the Corps and

the USFWS, determines that an exception is warranted, or an alternative standard meets the goal. A permit holder may provide monitoring data from appropriate reference sites to support a finding that an exception should be allowed because regional factors such as abnormal weather may be influencing the monitoring data and the data are within the normal variability of the region.

(a) The Hydrology and Topography Standards below have the goal of restoring and sustaining the natural range of extent, depth and duration of water, and topography:

(A) The acreage of vernal pool wetlands meeting the criteria in the 1987 Corps Wetlands Delineation Manual (Corps 1987) and the Arid West Regional Supplement (Corps 2008) on the mitigation site must not decline below the initial baseline acreage except where the initial condition included artificially expanded pools due to irrigation leakage. Restore and manage projects must demonstrate that the target wetland acreage was achieved;

(B) Eighty-five (85) percent of the vernal pools must have a mean high water depth of 4 to 11 inches near the end of January. Mean high water can be determined by water depth measurements, or upper extent of hydrophytic plants or vernal pool vegetation association. This standard must be met in any of the first 3 years after construction or establishment in which precipitation is within the normal range; and

(C) For restored vernal pools, the height of the top of mound to bottom of the vernal pool ranges between 22 and 32 inches and the side slopes for the vernal pool are no steeper than 7:1.

(b) The vegetation standards below have the goal of restoring and maintaining plant communities dominated by native species typical of least-disturbed reference site vernal pool wetlands and surrounding uplands. The outer boundary of a vernal pool must be considered the same as the delineated wetland boundary. Vernal pool vegetation standards are as follows:.

(A) The absolute extent of exposed substrate must be no more than 75 percent;

(B) Native vernal pool species relative percent cover (excluding substrate) must be at least 70 percent;

(C) Non-native invasive species relative percent plant cover must be no more than 15 percent; and

(D) At least 15 native species must be present in existing vernal pools designated for protection and management and at least 10 native species must be present in restored and managed vernal pools. These species counts must be evaluated in the same set of sample of plots needed to meet the statistical confidence described below.

(c) Upland (mound) vegetation standards are as follows:

(A) Native species relative percent plant cover must be at least 25 percent;

(B) Medusahead (*Taeniatherum caput-medusae*) relative percent cover must be no more than 25 percent;

(C) Non-native invasive species (other than Medusahead) total relative percent plant cover must be no more than 25 percent;

(D) At least 20 native upland herbaceous species must be present. The species count must be evaluated in the same set of sample of plots needed to meet the statistical confidence described below;

(E) Less than five percent relative plant cover must be comprised of woody species other than oak and/or chaparral; and

(F) For areas dominated by chaparral or oak at the beginning of the mitigation project, the relative cover of chaparral and/or stem count of oak must be within 20 percent of the baseline amount at the end of the monitoring period, unless the reduction is due to wildfire outside the control of the permittee, or due to prescribed fire or thinning approved by the Department to restore historic or natural stand structure.

(d) Federally Listed Species Standards below have the goal of sustaining or increasing local populations of listed and rare species. The following vernal pool fairy shrimp standards must be satisfied within five years of the establishment of the mitigation site:

(A) Percent of pools occupied by vernal pool fairy shrimp must be increased to, and maintained above 20 percent, increased and maintained at an increased level if the first year is above 20 percent, or maintained at or above 30 percent if the first year is 30 percent or greater; and

(B) Percent of pools occupied by vernal pool fairy shrimp must not fall below the natural range of variability as determined in comparison to applicable reference sites.

(e) Cook's Desert parsley (*Lomatium cookii*) and Meadowfoam (*Limnanthes floccosa* ssp. *grandiflora*) standards are as follows:

(A) Cook's Desert parsley and Meadowfoam populations must be maintained within the natural range of variability or increased. For sites already supporting this species at startup, populations must not fall below 1.5 standard deviations from the established baseline level. The baseline level is the average number of individual plants observed in the first five non-drought years of surveys; and

(B) For sites where these plants are to be re-introduced, establishment will be considered successful when 200 plants are present on the mitigation site in each of 3 consecutive non-drought years, without re-planting.

(12) **Monitoring Methods.** The following methods must be used to collect monitoring data:

(a) Hydrology and Topography:

(A) A wetland delineation of the mitigation site must be conducted during spring of a year of dry or normal precipitation, sometime during the first five years after restoration work. The wetland delineation must comply with the 1987 Corps Wetlands Delineation Manual and Arid West Regional Supplement;

(B) Ground photographs of the vernal pools at the site must be taken twice annually, once during the peak period of inundation (January) and once during vernal pool flowering period (April through June). Photos must be taken from at least five permanently marked and mapped photo-points to show representative portions of the mitigation site;

(C) Pool depth must be measured near the end of January during each year for the first three years for which total precipitation for the water year up to the date of sampling is within normal range as defined on p. 95 of the 2006 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, available on the DSL Website. For Medford, this range is between 5.1 and 11.7 inches total precipitation between October 1 and January 30. The pools to be measured must be selected from a sample grid or transect lines so that the sample is unbiased, and the number of samples must be sufficient to demonstrate 80 percent confidence level; and

(D) Pool side slope steepness must be evaluated using at least three cross-section transects of the surveyed, as-built grading figure for restoration sites. The elevation contours in the as-built must be accurate to 6 inches or less.

(b) Vegetation and Substrate:

(A) Vegetation monitoring of vernal pools and uplands must be conducted each spring during peak flowering periods (typically early May). Timing of surveys may be adjusted according to yearly climatic conditions; repeat visits may be needed to confirm identification of all plant species;

(B) Point intercept or quadrat sampling methods on a grid or transect lines may be used to collect cover data but once one or the other method is selected and employed, it must be consistently used throughout the monitoring period. For sites containing trees, sample plots of at least 30 feet radius or equivalent area must be permanently marked (center point) and all trees greater than 1 inch diameter counted. All vegetation and

substrate sampling must be unbiased, representative of the study area, and be sufficient to estimate cover with 80percent confidence intervals. Sampling locations must be marked in the field or re-locatable by GPS so that data and results will be repeatable by a third party verifier;

(C) Vegetation and substrate must be sampled to acquire the following data at sample plots or points:

(i) Percent cover of vegetation (data must include identification to species of all vascular plant species that have one percent or greater cover within the sample);

(ii) Percent cover of exposed substrate and the nature of disturbance causing it to be bare (inundation, livestock, rodent activity, etc);

(iii) Percent cover of native, non-native, and non-native invasive plant species; and

(iv) Percent cover of thatch (dead vegetation), and cover of cryptobiotic soil crust.

(c) Fairy shrimp (*Branchinecta lynchii*) Sampling:

(A) Vernal pools must be sampled using a statistically representative number of samples at least once each winter, when shrimp have matured enough to be identifiable. Except as otherwise approved by the Department, the sampling layout for the percent of pools occupied by shrimp (occupancy) should be a grid system with 30 random x-y coordinates marked in the field. Each sample is the nearest pool that has a minimum of three inches water depth on the date of sampling. On small sites or low-water years, some pools may be counted multiple times. The percent of sample pools occupied on the one date with the maximum occupancy will be reported each year;

(B) The baseline occupancy is the highest percent occupancy recorded during the initial 5 years, excepting drought years. The range of variability is the range established in the initial five non-drought years; and

(C) To avoid harm to listed species, sampling methods must follow the Guidance to Assist in the Assessment of, and Conservation Efforts for, Vernal Pool Systems on the Agate Desert, Jackson County, Oregon, dated June 2008, available on the Department Web site.

(d) Rare Plant Sampling:

(A) The baseline population counts for Cook's Desert parsley and Meadowfoam must be determined based on surveys during non-drought years. If there is failure to employ an applicable best management practice, or other obvious mismanagement which results in a depressed rare plant population, the data collected that year must not be included in the average for the baseline population, and an additional year added to the

monitoring period. When necessary to determine the effects of grazing on rare plant populations, the Department may require comparative data from areas that exclude livestock; and

(B) Rare plant population counts may be assessed by complete census for small sites or by statistical sampling as described above for other vegetation metrics. Data must be collected in spring when target plants are optimally identifiable.