

LOWER GRANITE LOCK AND DAM MASTER PLAN

2018

Appendix A - F

Appendix A

Conservation Measures (p. 72 BA)

The Corps proposes the following conservation measures as part of the proposed action in order to reduce potential adverse effects related to implementation of the proposed action. These conservation measures are not mean to be mitigation for the proposed action, but are integral to the reduction of impacts (potential adverse effects) that may be incidental to the proposed action, and must be considered when analyzing the potential effects of the proposed action.

The following impact minimization measures will be implemented by the Corps as part of the proposed action.

1. All applicators shall be state licensed or certified, or under the direct visual supervision of a state licensed or certified applicator.
2. All application equipment (e.g. booms, back packs, etc.) shall be properly calibrated according to the chemical manufacturer's suggested application rates printed on the chemical label prior to use. Equipment and settings shall be properly maintained for the duration of the contract performance period.
3. Dyes shall be used to reduce the potential for over-application.
4. Appropriate sized nozzles shall be used to maximize droplet size and reduce the potential for drift.
5. All concentrated or mixed solution pesticides shall be placed in locked storage in closed containers with watertight lids, placed in secondary containment vessels of 125 percent [capacity] when not in use.
6. All mixing for spray bottles, and backpack sprayers shall be done within secondary containment of 125 percent capacity of the liquid.
7. Wind speeds identified in Table 12 by chemical shall be adhered to. [In an E-mail dated September 5, 2012, the Corps narrowed the wind speed limit from less than 10 miles per hour (mph), to less than 5 mph for aerial applications further than 300 feet from the ordinary high water mark.]
8. Buffers from water identified in Table 12 shall be adhered to.
9. All applications shall be made in temperatures of 90 degrees Fahrenheit or less, unless the label conditions are more restrictive.

10. Applications shall not be made 24 hours prior to a predicted precipitation event sufficient to cause runoff (using NOAA's [National Oceanic and Atmospheric Administration] National Weather Service¹ to determine probability of a major precipitation event).
11. All applications will be recorded on Corps' pesticide application record (NWW Form 1130-8) (Appendix D) or equivalent state form, including GPS coordinates or a GIS polygon (including treatment area/acreage) of application, and compiled at the end of the season for use in reporting, monitoring, and planning for the following year. An annual report will be produced by all contractors, outgrantees, or other applicators by 1 February of the following year summarizing area of weeds treated by species, chemical used, and amount used (concentrate). This summary report will be forwarded to the Services by the District's Environmental Compliance Section.
12. ATV storage tanks shall be limited to 30 gallons.
13. A spill kit will be available to all persons making applications within 150 feet from the site of the application.
14. Refueling of equipment in areas not designed for refueling (i.e. in HMUs) will not occur within 100 feet of open water. This includes ATVs, trucks, tractors, aircraft, etc.
15. All applicators will develop and carry a Spill Prevention and Control Plan approved by the District, or detailed requirements will be explicitly spelled out in contract specifications by the Corps prior to contractor personnel or equipment operation near any stream drainage. The Plan will provide detailed descriptions on how to prevent a spill or ensure effective and timely containment of any chemical spill. The Spill Prevention and Control Plan will include spill control, containment, clean up, and reporting procedures.
 - 15.1. Each Contractor vehicle carrying herbicides shall be equipped with a spill cleanup kit. The cleanup kit shall be capable of containing and holding at least 125 percent of the total mixture and concentrate that are present on the work site. The Contractor shall report all details of herbicide spills, exposure incidents, or accidents and/or worker health complaints, if any occur, to the Corps as soon as practicable.
 - 15.2. No herbicide mixing will be authorized within 100 ft from any body of water or stream channels. Equipment will have either an anti-back siphon valve or an air break on tank fill connections or openings to prevent contamination of on-site water sources.
 - 15.3. Mixing (other than that of equipment that mixes internally as applications are being made) will be performed within a temporary structure made of impermeable material such as plastic that is capable of containing at least 125 percent of the capacity of the spray tank that is being used, or on appropriate absorbent materials of sufficient capacity to absorb the entirety of that volume of the tank being mixed. Examples of the temporary mixing structure will be a wooden frame lined with plastic sheeting or a child's wading pool.

¹ <http://www.weather.gov>

- 15.4. Equipment will be inspected for leaks and cleaned prior to crossing any stream. Any detected leaks will be repaired before the equipment crosses the stream or near open water when not on an existing road.
- 15.5. Equipment will be inspected and cleaned prior to any application of herbicides within 150 feet of open water.
16. Application equipment will be maintained to ensure proper application rates, to minimize leakage potential, reduce the potential for drift, and ensure applicator safety. Equipment will be maintained and visually inspected prior to each application includes, but is not limited to: hoses, nozzles, backpacks, and booms.
17. The Corps has selected chemicals based on the need in the District, as well as what has been consulted on in the region with known effects, and will be applied in a manner consistent with other Federal agencies in the Northwest and with what has been identified in standing BOs from NMFS and USFWS [Service], to include buffers and wind speeds (Table 12), as well as in accordance with label requirements.
18. All applicators shall comply with all applicable Federal, State (Oregon, Idaho, and Washington) and herbicide manufacturer's directions and requirements for handling herbicides and insecticides, including storage, transportation, application, container disposal, and cleanup of spills.
19. Herbicide treatments to foliage of weed species shall be according to the chemical manufacturer's recommendations for best results. Applicators shall use caution to minimize the application of herbicides to non-target species and structures within the application areas.
20. Although surveys indicate that there are no ESA-listed plants on Corps lands (Bailey 2008a, 2008b [as referenced in BA]), any ESA-listed plant that is found will be inventoried, and its location captured either in GIS or by GPS, or both, and put into the District's inventory for future avoidance and planning purposes. Herbicides shall not be applied with aircraft within 300 feet, broadcast within 100 feet, or spot sprayed within 15 feet of ESA-listed plant locations identified during applications. Spraying of targeted species is limited to vinegar or similar within 300 feet or closer to known ESA-listed plant locations.
21. Crossing any open water body with spray equipment (i.e. floating vessels or land vehicles) or chemicals will be avoided if there is any land access (e.g., road or ATV trail) to the proposed treatment areas. If land access is not available or inaccessible due to steep terrain, all concentrated or mixed chemicals shall be transported within floating secondary containment vessels of 125 percent capacity of the liquid.
22. Disposal of waste materials shall [be] in accordance with the label and in accordance with all applicable Federal, State, and county laws regulations, as well as label restrictions and instructions.

23. All invasive, non-native riparian vegetation that is treated with herbicides will be monitored for two years following treatment. If desirable vegetation does not reestablish itself naturally, the Corps will plant or seed new native riparian vegetation in order to reduce the need for future chemical application in the area, and to improve shade and cover for listed fish and their habitat.
24. Motorized herbicide application equipment will not be operated on slopes greater than 25 percent (if not on existing roads) in order to minimize risk of soil erosion, spills, or chemical runoff, as well as for safety reasons.
25. No more than one application of picloram will be made on an area in any given year to reduce the potential for picloram accumulation in the soil.
26. No spraying of picloram will be authorized within 100 feet of any flowing waters or areas with shallow water tables. Avoid application of picloram within dry ephemeral stream channels and dry roadside ditches that drain directly into fish bearing streams.
27. The Corps will not spray if snow or ice covers the target foliage.
28. Nozzles and pressures which create droplet sizes of 176 microns or less shall not be used.
29. All aerial applications will be done on the contour. No turns would be allowed over "live" waters (e.g., flowing ditches, streams, ponds, springs, etc.) even though the booms are turned off at the end of each run.
30. Only aquatic approved herbicides and surfactants will be authorized for use within 15 feet of "live" waters or areas with shallow water tables. For example, only the aquatic formulations of 2,4-D and glyphosate will be used within 15 ft of water.
31. Only non-ester forms of 2,4-D will be used (no use of 2,4-D ester formulations will be authorized).
32. Skidoo (pyrethrins, piperonyl butoxide, butane, and propane) and Tempo SC ultra (beta-cyfluthrin) (insecticide) applications will be limited to spot spraying no closer than 15 feet from the water's edge. Applications will not be made when the wind is blowing toward the water, or when the insecticide has the potential to enter the water through drift or run-off.
33. Surveys for Washington ground squirrel will occur prior to using rodenticides in those areas where they are listed as candidates for listing under the ESA. Rodenticides will only be used in areas where Washington ground squirrel may occur after surveys for the species have confirmed no presence, or if suitable habitat does not exist in the treatment area. If the species is confirmed in an area, the Corps will work with the USFWS and local state wildlife agencies to minimize the potential impacts to Washington ground squirrel.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, Washington 98115

NMFS Tracking No.:
2012/00353

August 29, 2012

Michael S. Francis
Chief, Environmental Compliance
Walla Walla District, Corps of Engineers
201 North Third Avenue
Walla Walla, Washington, 99362-1876

Re: Endangered Species Act Section 7 Consultation and Magnuson-Stevens Essential Fish Habitat Response for the Pest Management Program for Corps of Engineers Managed Lands in the Walla Walla District in Oregon, Idaho, and Washington.

Dear Mr. Francis:

On July 5, 2012, the National Marine Fisheries Service (NMFS) received your request for written concurrence that the proposed Pest Management Program for Corps of Engineers (COE) Managed Lands in the Walla Walla District in Oregon, Idaho, and Washington is not likely to adversely affect (NLAA) species listed as threatened or endangered, or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.¹

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Act (MSA), including conservation measures and any determinations made regarding the potential effects of the action. This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.² In this case, NMFS concluded that the action would not adversely affect EFH. Thus, consultation under the MSA is not required for this action.

This letter is in compliance with section 515 of the Treasury and General Government Appropriations Act of 2001 (Data Quality Act) (44 U.S.C. 3504 (d) (1) and 3516), and underwent pre-dissemination review using standards for utility, integrity and objectivity.

¹ Memorandum from D. Robert Lohn, Regional Administrator, to ESA consultation biologists (guidance on informal consultation and preparation of letters of concurrence) (January 30, 2006).

² Memorandum from William T. Hogarth, Acting Administrator for Fisheries, to Regional Administrators (national finding for use of Endangered Species Act section 7 consultation process to complete essential fish habitat consultations) (February 28, 2001).



Consultation History

The COE has made infrequent requests for ESA consultation related to pest management, though they note in the Biological Assessment (BA) they have been treating pests for between 30 and 40 years. NMFS concurred May 13, 2010 with the consultation request for the Treatment of Aquatic Vegetation at Levee Pond 12-1 Adjacent the Columbia River at Pasco, Franklin County, Washington (NMFS, 2010/00613). Given the lack of consultations and time span between Levee Pond 12-1 consultation and this one; there is no established recent pattern of practice.

NMFS received a request for consultation from the Walla Walla District of the COE on February 8, 2010 concerning its pest management program. NMFS determined the request contained insufficient information to initiate consultation. The COE evaluated its goals and program, and a coordination meeting was held between the COE and NMFS at the Department of Ecology Yakima office on December 2, 2010. Staff discussions between the COE and NMFS continued. To clarify its concerns, NMFS sent a letter to the COE on April 7, 2011. On February 8, 2012, NMFS received an updated and revised request for consultation, using the EPA Pesticides General Permit (PGP) and related NMFS' Biological Opinion as a partial basis for the request. Staff discussions continued, and on April 9, 2012 NMFS sent a letter to the COE noting insufficient information on which to initiate consultation in the latest consultation request, suggesting changes and additions, and dropping the use of the PGP as a basis for the consultation due to the PGP not yet being suitable for this type of consultation. A conference call was held on June 19, 2012 with the COE, Fish and Wildlife Service, and NMFS participating. A modified consultation request was received from the COE by NMFS on July 5, 2012. NMFS staff reviewed the submitted biological assessment and related materials, discussed them with COE staff and participated in a COE-sponsored site visit on August 22, 2012. NMFS concluded on August 23, 2012 sufficient information was presented to initiate consultation. A complete record of this consultation is on file at the Washington State Habitat Office in Lacey, Washington.

Description of the Proposed Action and the Action Area

The Army Corps of Engineers proposes a management program for animal and plant pests on COE-controlled lands within the Walla Walla District, generally described as lands along the Columbia and Snake Rivers associated with dams and in Idaho, Oregon, and Washington. The goals of the program are to improve habitat conditions and ensure public health and safety using traditional mechanical, biological, and chemical techniques. These techniques will be employed by COE personnel or contractors, from March through September of each year. , Of the total 154,313 District acres, up to five percent (8,000 acres) will be treated annually and there will be no treatment of aquatic vegetation or animals. The COE typically treats 3,200 to 3,600 acres of terrestrial vegetation each year using mechanical, biological, and/or chemical practices. The BA describes pests and areas covered, treatments and associated practices, conservation measures, and provides justification for program proposals. Neither vegetation management on levees nor grazing is part of the proposed action.

The COE proposes to ensure that chemicals will not enter water in amounts capable of causing significant effects to listed species. They will employ conservation and protection measures that become more stringent as risks to ESA-listed fish and their designated critical habitats increase.

With prior notification to NMFS, helicopters will aerial apply a maximum of 1,350 acres every two years in areas greater than 300 feet from water or pathways to water. Aerial application will be used in inaccessible areas and areas where it is impractical to use other methods (such as crew safety).

Broadcast spraying includes vehicle-mounted booms, boomless nozzles, and backpack sprayers and the COE estimates about 18 percent of these treatments will be from ground-based motorized vehicles and 35-to-40 percent using backpack sprayers. Spot spraying is the COE's most commonly used application method and is done with variations of backpack tanks or tanks mounted on vehicles (like trucks, quads, or tractors). These methods would be used between 15 and 300 feet from water and with conservation measures as described in the BA, and the NMFS' and FWS' BOs.

Hand or manual methods are directed to specific plants, directly applying chemicals to those plants. Hand methods will be used for those areas within 15 feet of water with ESA-listed fish or their critical habitat. Mechanical methods can include hand-work or equipment, and involve practices like pulling, digging-up plants using hand tools, or disking by implements being pulled by a motorized vehicle. These methods generally involve disturbing soil.

Chemical treatments within 15 feet of "live" waters and in areas of shallow water tables will only use herbicides approved for aquatic use. The methods to be used, depending on the plants and conditions are wicking and wiping (herbicide wiped onto plants), basal bark (herbicide applied to girdle the plant), frill (also known as "hack and squirt" where herbicide inserted into a cut on the plant), stem injection (injection of herbicide into plant stem via specialized equipment), and cut-stump (herbicide applied to vegetative stump after plant is cut). Hand methods are plant specific, with no drift from sprays, and are the most "controlled" method of herbicide application. During the site visit, the COE estimated within this 15 foot band they will be treating a total of two-three acres each year and up to 15 miles along tributaries out of the 861 total (about 1.7 percent).

Biological controls typically work slowly and are designed to work only on the target species. Native vegetation is expected to recolonize areas where invasives were treated and died, becoming reestablished and preventing soil erosion and loss of stream shade while stabilizing banks with their roots.

In some cases, the COE anticipates more than one pest treatment in a year might be necessary, and also treatments might have to occur over time until the pest species are eradicated or controlled. Annual reports will address areas needing multiple and/or on-going treatment. The related action of routine operation and maintenance for pest management purposes along roaded areas, park lands, other developed areas, and administrative complexes, carried out with proposed conservation measures and due to their limited and de minimus nature, are not expected to affect ESA-listed fish or their critical habitats. Related to operations which the COE itself carries out, the COE sometimes "subcontracts" pest management to mosquito control districts, cities and counties, weed control districts and others. These other entities, acting as agents of the COE, are subject to this consultation.

Action Area

The COE provides substantial description of the action area in the BA. The action area includes all lands and other facilities owned and administered by the Corps, and includes lands in 12 counties in three states:

- Counties in Idaho: Ada, Boise, Clearwater, Elmore, Nez Perce
- Counties in Oregon: Umatilla
- Counties in Washington: Asotin, Benton, Columbia, Garfield, Walla Walla, Whitman

The COE divides the Walla Walla District into five operating areas, describing stream reaches and identified hydrological unit codes (HUCs), and primary facilities (dams, locks, parks, reservoirs, and district offices). The operating areas are:

1. Columbia River
2. Snake River
3. Dworshak
4. Lucky Peak
5. Mill Creek

The action area is 154,313 acres and the area covered by the BA is a nominal 72,000 acres, of which 28,406 is forest habitat around Dworshak, 35,117 in shrub/steppe around the rest of the projects, and 8,444 park/recreation acres. (While not part of the land-base, the District also has 84,343 acres of reservoirs and 861 miles of river, ponds, and ditches.) Anadromous, ESA-listed fish under NMFS' jurisdiction do not occur throughout the action area. They are not found in the COE's Lucky Peak operating area or above Dworshak Dam. Fish passage in the Snake River ends at river mile (RM) 247 at Hell's Canyon Dam and at about RM 1.7 on the North Fork of the Clearwater River at Dworshak Dam.

ESA-listing and critical habitat designations are shown in Table 1. Many of the streams or stream reaches throughout the action area were also designated EFH for Chinook salmon (*O. tshawytscha*) and coho salmon (*O. kisutch*) by the Pacific Fishery Management Council in 1999.

Table 1 ESA Listing Status, Date of Listing, and Federal Register Notice Date and Critical Habitat Designation Date and Federal Register Notice Date.

| Species | Listing Status, Date and Federal Register Notice | Critical Habitat Designation Date and Federal Register Notice |
|---|---|---|
| Chinook salmon (<i>Oncorhynchus tshawytscha</i>) | | |
| Upper Columbia River spring-run | Endangered 6/28/05; 70 FR 37160; Status reaffirmed 8/15/11 76FR50448 | 9/2/05; 70FR52630 |
| Snake River spring/summer run | Threatened 6/28/05; 70 FR 37160; Status reaffirmed 8/15/11 76FR50448 | 10/25/99; 64FR57399 |
| Snake River fall-run | Threatened 6/28/05; 70 FR 37160; Status reaffirmed 8/15/11 76FR50448 | 12/28/93; 58FR68543 |
| Sockeye salmon (<i>O. nerka</i>) | | |
| Snake River | Endangered 6/28/05; 70 FR 37160; Status reaffirmed 8/15/11 76FR50448 | 12/28/93; 58FR68543 |
| Steelhead (<i>O. mykiss</i>) | | |
| Middle Columbia River | Threatened 1/05/06; 71 FR 834. Status reaffirmed 8/15/11 76FR50448 | 9/2/05; 70FR52630 |
| Upper Columbia River | Threatened 6/18/09; court decision. Status reaffirmed 8/15/11 76FR50448 | 9/2/05; 70FR52630 |
| Snake River Basin | Threatened 1/05/06; 71 FR 834. Status reaffirmed 8/15/11 76FR50448 | 9/2/05; 70FR52630 |

Effects of the Action

For purposes of the ESA, “effects of the action” means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find a proposed action is NLAA listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial.³ Beneficial effects are contemporaneous positive effects without any adverse effects to the species. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur. Pest management activities covered in this

³ U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1998. Endangered Species Act consultation handbook: procedures for conducting section 7 consultations and conferences. March. Final. P. 3-12.

consultation are manual and mechanical methods, biological methods, and chemical methods. This effects analysis pertains only to those areas with ESA-listed fish or their critical habitat.

Chemicals (active and inert ingredients) may enter water indirectly via precipitation, run-off, and by being attached to soil particles or vegetable matter that is washed into water. Chemicals could be directly introduced into water bodies by chemical drift caused by wind, spills, or mis-application. There is uncertainty regarding chemical effects as some of the active ingredients have not been thoroughly studied (e.g. tests were made on non-salmonids and in laboratory conditions), there is often limited disclosure of the composition of inert ingredients (Often cited as “Other” or citing proprietary interests as a reason for nondisclosure), the fate of the ingredients is often unclear (e.g. degrades, and synergistic and cumulative effects), and the effectiveness of pesticide application best management practices has not been fully tested. Despite uncertainty, taken together, the chemicals in the proposed action are among herbicides least toxic to fish, applied infrequently at low rates, and applied in relatively small geographic areas at any given time. Moreover, the uncertainty does not come into play as chemicals will be kept out of water.

Turbidity could be caused by ground treatments where vegetation is pulled up, rooted-out mechanically, or by similar, ground-disturbing measures. It could also be caused by vehicles or persons traveling disturbing soil, which could then be washed into streams. Because of the limited scope of sediment-producing activities that might result in turbidity and deposition of fine sediment, the scale of the activity relative to the overall land base in the area, the judicious use of buffers near water bodies where only hand methods will be used, the duration and magnitude of turbidity-producing events being limited, and the proposed conservation measures; NMFS is reasonably certain effects from turbidity on ESA-listed fish or designated critical habitat are extremely unlikely and effects would be insignificant.

Stream temperatures could be affected by the treatment of riparian vegetation. Dead or removed riparian vegetation provides less shade, and the related cooling effect, than does the same vegetation when it is alive. Stream temperature can be affected by the scope and scale of the project, the amount of shade reduction expected to be limited and short-term until plant regrowth occurs, and the overall amount of shaded area on these huge river systems being minute compared to the total surface area exposed to the heat-producing effects of the sun on many of the streams. Other factors outside the scope of the project (e.g. topographic shading, elevation and aspect) also affect stream temperature. Considering these factors and the conservation measures, NMFS is reasonably certain any temperature effects on ESA-listed fish or their critical habitat will be insignificant and short-term as native vegetation is re-established.

Disturbance of fish can result from pest management program (i.e. physical presence, movement, sounds, and vibrations of equipment and people). Activities with potential to disturb ESA-listed fish, such as equipment use, will be at least 15 feet from water and at least a modicum of riparian vegetation between. Because of this factor and the small scale, scope, duration, and intensity of the activity, NMFS is reasonably certain the effects of disturbance will be insignificant.

Proposed manual and mechanical methods can potentially affect riparian vegetation and structure (and instream habitat from things such as wood inputs) thus reducing shade (and accompanying

stream temperature increases) and food while increasing turbidity and water temperature. NMFS expects effects from these procedures to be insignificant because they are of low intensity, short-duration, geographically dispersed, of limited scope, and they would not remove native, non-invasive plants. Disturbed areas will undergo site preparation (re-contouring to pre-work relief and seed bed preparation) and be seeded or planted with locally appropriate native species during February when soil moisture is highest. Accordingly, when considering these factors coupled with conservation measures, NMFS believes these effects are insignificant.

The COE's BA denotes chemicals will not enter water bodies in amounts known or suspected of causing adverse effects to ESA-listed fish. Specific chemical preparation, storage, use, reporting and monitoring, and related measures are described in the BA. Considering these measures, significant effects from exposure to chemicals are unlikely.

Hazard quotient risk assessment for this action was based on typical chemical application rates and 50 inches of rain per year. The highest average rainfall in the area is about 27 inches per year, thus that part of risk is conservatively assessed. In the case of a sudden rain storm washing chemicals into a water body or chemical binding to soil/vegetation, NMFS believes this is unlikely based on past experience and conservation measures. In most cases, receiving waters in the areas being treated have large volumes, and the relatively minute amounts of chemicals have short half-lives, and would quickly dissipate. Chemicals used adjacent to water bodies must be approved for aquatic use, which minimizes the risk of adverse effects in the event that chemicals reach a stream. Uncertainties encompass chemical use due to such things as non-disclosure on inert ingredients, chemical fates, synergistic and cumulative effects and the like. There are no described chemicals in the proposed action that have no-effect on ESA-listed fish. However, the COE is committed to ensuring that chemicals will not reach concentrations known to cause adverse effects in waters occupied by any of the subject ESA-listed fish species.

Adverse effects are unlikely because these primary conservation measures nearly eliminate the potential exposure of ESA-listed fish to pesticides and the concentrations of chemicals that may occur will be too low to cause harmful effects: (1) Only hand methods within 15 feet of "live" water for herbicides not approved for aquatic use; (2) 300 foot buffers for aerial spraying; 50-300 foot buffers for broadcast methods; 15-300 foot buffers for spot spraying, (3) Wind speed restrictions minimizing and avoiding contamination by wind drift; (4) Herbicides used within 15 feet of water must be approved for aquatic use by EPA or state water quality agency; (5) Herbicides proposed for use are restricted to chemicals with relatively well-documented fish effects and which are known to have moderate or low toxicity to fish; (6) The small amount of acreage treated relative to the overall action area; (7) The dispersed nature of the applications, and (8) Large volumes of water in many of the water bodies (e.g. Columbia River). Considering these conservation measures and those mentioned in the BA, effects on ESA-listed species or their designated habitats are likely to be insignificant.

Conclusion

Accordingly, based on proper execution of the minimization measures in the proposed action and the preceding, NMFS concurs with the COE's determination of "may affect, not likely to adversely affect" for the species and critical habitats in the action area. Concurrence is based on

the information in the Biological Assessment; meetings, e-mail and telephone conversations, and is contingent on the full implementation of the conservation measures.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by the COE, or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA portion of this consultation.

Thank you for your efforts to protect these salmonids and their critical habitat. The NMFS has determined there are no adverse effects on salmon essential fish habitat, under the Magnuson-Stevens Fishery Conservation and Management Act. If you have any questions regarding either the ESA or EFH consultation, please contact Dale Bambrick of the Washington State Habitat Office at (509) 962-8911 x221 or email at Dale.Bambrick@noaa.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "William W. Stelle, Jr.", is positioned above the printed name.

William W. Stelle, Jr.
Regional Administrator

cc: Michelle Eames, US Fish and Wildlife Service

Appendix B

State-Listed Threatened, Endangered, and Sensitive Species

| Species | Scientific Name | US* | ID** | WA*** |
|---|---|-----|------|-------|
| Plants | | | | |
| Palouse milk-vetch | <i>Astragalus arrectus</i> | | T | T |
| Arthur's milk-vetch | <i>Astragalus arthurii</i> | | | S |
| Asotin milk-vetch | <i>Astragalus asotinensis</i> | | E | E |
| Piper's milk-vetch | <i>Astragalus riparius</i> | | | E |
| Sagebrush mariposa-lily | <i>Calochortus macrocarpus</i> , Douglas var. <i>maculosus</i> | | | E |
| Broad-fruit mariposa | <i>Calochortus nitidus</i> | | Co | E |
| Palouse Thistle | <i>Cirsium brevifolium</i> | | T | |
| Spacious Monkeyflower | <i>Mimulus ampilatus</i> | | E | |
| Tufted evening-primrose | <i>Oenothera cespitosa</i> vssp. <i>Marginata</i> | | | T |
| Whitebark Pine | <i>Pinus albicaulis</i> | C | Co | |
| Palouse Goldenweed | <i>Pyrrocoma liatrifomis</i> | | T | |
| Northwest Raspberry | <i>Rubus nigerrimus</i> | Co | | E |
| Spalding's Catchfly | <i>Silene spaldingii</i> | T | E | T |
| Purple Thick-leaved Thelypody | <i>Thelypodium laciniatum</i> var. <i>streptanthoides</i> | | T | |
| Fish | | | | |
| White Sturgeon | <i>Acipenser transmontanus</i> | | T | |
| Mountain Sucker | <i>Catostomus platyhynchus</i> | | | C |
| Pacific Lamprey | <i>Entosphenus tridentatus</i> | | E | |
| River Lamprey | <i>Lampetra ayresi</i> | Co | | C |
| Peamouth | <i>Mylocheilus caurinus</i> | | Co | |
| Snake River Basin Steelhead | <i>Oncorhynchus mykiss</i> | T | T | C |
| Snake River Sockeye | <i>Oncorhynchus nerka</i> | E | E | C |
| Snake River Spring/Summer-Run Chinook | <i>Oncorhynchus tshawytscha</i> | T | E | C |
| Snake River Fall-Run Chinook | <i>Oncorhynchus tshawytscha</i> | T | E | C |
| Sand Roller | <i>Percopsis transmontana</i> | | E | |
| Leopard dace | <i>Rhinichthys falcatus</i> | | Co | C |
| Bull Trout | <i>Salvelinus confluentus</i> | T | | C |
| Amphibians & Reptiles | | | | |
| Western Toad | <i>Anaxyrus boreas</i> | | T | C |
| Woodhouse's Toad | <i>Anaxyrus woodhousii</i> | | T | |
| Rocky Mountain Tailed Frog | <i>Ascaphus montanus</i> | | Co | C |
| Ring-necked Snake | <i>Diadophis punctatus</i> | | Co | |
| Desert Nightsnake | <i>Hypsiglena chlorophaea</i> | | Co | |
| Striped Whipsnake | <i>Masticophis taeniatus</i> <i>taeniatus</i> | | | C |

| | | | | |
|------------------------|-------------------------------------|--|----|---|
| Columbia Spotted Frog | <i>Rana luteiventris</i> | | T | C |
| Sagebrush Lizard | <i>Sceloporus graciosus</i> | | | C |
| Common Gartersnake | <i>Thamnophis sirtalis</i> | | Co | |
| Birds | | | | |
| Common redpoll | <i>Acanthis flammea</i> | | Co | |
| Northern Goshawk | <i>Accipiter gentilis</i> | | Co | C |
| Spotted Sandpiper | <i>Actitis macularius</i> | | Co | |
| Western grebe | <i>Aechmophorus occidentalis</i> | | T | C |
| Grasshopper Sparrow | <i>Ammodramus savannarum</i> | | Co | |
| Sagebrush Sparrow | <i>Amphispiza nevadensis</i> | | | C |
| Green-winged Teal | <i>Anas crecca</i> | | Co | |
| Cinnamon Teal | <i>Anas cyanoptera</i> | | Co | |
| Eurasian Widgeon | <i>Anas Penelope</i> | | E | |
| Gadwall | <i>Anas strepera</i> | | Co | |
| American Pipit | <i>Anthus rubescens</i> | | Co | |
| Golden Eagle | <i>Aquila chrysaetos</i> | | Co | C |
| Great Egret | <i>Ardea alba</i> | | T | |
| Great Blue Heron | <i>Ardea herodias</i> | | | |
| Short-eared Owl | <i>Asio flammeus</i> | | Co | |
| Western Burrowing Owl | <i>Athene cunicularia</i> | | | C |
| Lesser Scaup | <i>Aythya affinis</i> | | | |
| Canvasback | <i>Aythya valisineria</i> | | Co | |
| Upland Sandpiper | <i>Bartramia longicauda</i> | | E | C |
| Bufflehead | <i>Bucephala albeola</i> | | E | |
| Barrow's Goldeneye | <i>Bucephala islandica</i> | | Co | |
| Ferruginous Hawk | <i>Buteo regalis</i> | | Co | T |
| Sanderling | <i>Calidris alba</i> | | E | |
| Dunlin | <i>Calidris alpine</i> | | E | |
| Baird's Sandpiper | <i>Calidris bairdii</i> | | T | |
| Western Sandpiper | <i>Calidris mauri</i> | | Co | |
| Pectoral Sandpiper | <i>Calidris melanotos</i> | | T | |
| Least Sandpiper | <i>Calidris minutilla</i> | | Co | |
| Semipalmated Sandpiper | <i>Calidris pusilla</i> | | E | |
| Veery | <i>Catharus fuscescens</i> | | Co | |
| Vaux's Swift | <i>Chaetura vauxi</i> | | Co | C |
| Semipalmated Plover | <i>Charadrius semipalmatus</i> | | E | |
| Ross's Goose | <i>Chen rossii</i> | | Co | |
| Black Tern | <i>Chlidonias niger</i> | | T | |
| Bonaparte's Gull | <i>Chroicocephalus philadelphia</i> | | Co | |
| American Dipper | <i>Cinclus mexicanus</i> | | Co | |
| Long-tailed Duck | <i>Clangula hyemalis</i> | | E | |
| Olive-sided Flycatcher | <i>Contopus cooperi</i> | | Co | |
| Blue Jay | <i>Cyanocitta cristata</i> | | E | |
| Trumpeter Swan | <i>Cygnus buccinators</i> | | E | |

| | | | | |
|---------------------------|----------------------------------|---|----|---|
| Yellow-billed Cuckoo | <i>Coccyzus americanus</i> | T | E | C |
| Bobolink | <i>Dolichonyx oryzivorus</i> | | T | |
| Pileated Woodpecker | <i>Dryocopus pileatus</i> | | | C |
| Prairie Falcon | <i>Falco mexicanus</i> | | | M |
| Peregrine Falcon | <i>Falco peregrinus</i> | | T | T |
| Wilson's Snipe | <i>Gallinago delicata</i> | | Co | |
| Common Loon | <i>Gavia immer</i> | | E | S |
| Northern Pygmy-Owl | <i>Glaucidium gnoma</i> | | Co | |
| Sandhill Crane | <i>Grus canadensis</i> | | Co | E |
| Bald Eagle | <i>Haliaeetus leucocephalus</i> | | | |
| Harlequin Duck | <i>Histrionicus histrionicus</i> | | E | |
| Caspian Tern | <i>Hydroprogne caspia</i> | | E | |
| Pileated Woodpecker | <i>Hylatomus pileatus</i> | | | C |
| Northern Shrike | <i>Lanius excubitor</i> | | Co | |
| Loggerhead Shrike | <i>Lanius ludovicianus</i> | | Co | C |
| Herring Gull | <i>Larus argentatus</i> | | T | |
| California Gull | <i>Larus californicus</i> | | T | |
| Ring-billed Gull | <i>Larus delawarensis</i> | | T | |
| Glaucous-winged Gull | <i>Larus glaucescens</i> | | E | |
| Franklin's Gull | <i>Leucophaeus pipixcan</i> | | Co | |
| Marbled Godwit | <i>Limosa fedoa</i> | | T | |
| Hooded Merganser | <i>Lophodytes cucullatus</i> | | T | |
| Western Screech-Owl | <i>Megascops kennicottii</i> | | E | |
| Lewis's Woodpecker | <i>Melanerpes lewis</i> | | Co | C |
| Red-breasted Merganser | <i>Mergus aerator</i> | | E | |
| Common Merganser | <i>Mergus merganser</i> | | Co | |
| Northern Mockingbird | <i>Mimus polyglottos</i> | | E | |
| Clark's Nutcracker | <i>Nucifraga columbiana</i> | | T | |
| Long-billed Curlew | <i>Numenius americanus</i> | | T | |
| Black-crowned Night-Heron | <i>Nycticorax nycticorax</i> | | T | |
| Mountain Quail | <i>Oreortyx pictus</i> | | T | |
| Sage Thrasher | <i>Oreoscoptes monanus</i> | | Co | C |
| Flammulated Owl | <i>Otus flammeolus</i> | | Co | C |
| Ruddy Duck | <i>Oxyura jamaicensis</i> | | T | |
| American white pelican | <i>Pelecanus erythrorhynchos</i> | | Co | E |
| Gray Jay | <i>Perisoreus canadensis</i> | | T | |
| Red-necked Phalarope | <i>Phalaropus lobatus</i> | | Co | |
| White-headed Woodpecker | <i>Picoides albolarvatus</i> | | T | C |
| Black-backed Woodpecker | <i>Picoides arcticus</i> | | Co | C |
| White-faced Ibis | <i>Plegadis chihi</i> | | T | |
| Pied-billed Grebe | <i>Podilymbus podiceps</i> | | Co | |
| American Golden-Plover | <i>Pluvialis dominica</i> | | E | |

| | | | | |
|----------------------------|------------------------------------|----|----|----|
| Black-bellied Plover | <i>Pluvialis squatarola</i> | | E | |
| Horned Grebe | <i>Podiceps auritus</i> | | T | |
| Ring-necked Grebe | <i>Podiceps grisegena</i> | | T | |
| Eared Grebe | <i>Podiceps nigricollis</i> | | E | |
| Sora | <i>Porzana Carolina</i> | | E | |
| Virginia Rail | <i>Rallus limicola</i> | | T | |
| American Avocet | <i>Recurvirostra americana</i> | | Co | |
| American Redstart | <i>Setophaga ruticilla</i> | | T | |
| Western Bluebird | <i>Sialia Mexicana</i> | | Co | |
| American Tree Sparrow | <i>Spizella arborea</i> | | Co | |
| Foster's Tern | <i>Sterna forsteri</i> | | T | |
| Great Gray Owl | <i>Strix nebulosi</i> | | Co | |
| Bewick's Wren | <i>Thryomanes bewickii</i> | | Co | |
| Lesser Yellowlegs | <i>Tringa flavipes</i> | | T | |
| Greater Yellowlegs | <i>Tringa melanoleuca</i> | | Co | |
| Willet | <i>Tringa semipalmata</i> | | Co | |
| Solitary Sandpiper | <i>Tringa solitaria</i> | | E | |
| Sharp-tailed Grouse | <i>Tympanuchus phasinellus</i> | | Co | |
| White-throated Sparrow | <i>Zonotrichia albicollis</i> | | E | |
| Mammals | | | | |
| Pallid Bat | <i>Antrozous pallidus</i> | | Co | |
| Gray wolf | <i>Canis lupus</i> | | | E |
| Townsend's Big-eared Bat | <i>Corynorhinus townsendii</i> | | Co | C |
| Big Brown Bat | <i>Eptesicus Fuscus</i> | | Co | |
| Spotted Bat | <i>Euderma maculatum</i> | | Co | M |
| Wolverine | <i>Gulo gulo</i> | C | E | C |
| Silver-haired Bat | <i>Lasionycteris noctivagans</i> | | Co | |
| Hoary Bat | <i>Lasiurus cinereus</i> | | Co | |
| Snowshoe Hare | <i>Lepus americanus</i> | | Co | |
| Black-tailed Jackrabbit | <i>Lepus californicus</i> | | | C |
| White-tailed Jackrabbit | <i>Lepus townsendii</i> | | | C |
| Long-eared Myotis | <i>Myotis evotis</i> | | Co | |
| Little Brown Myotis | <i>Myotis lucifugus</i> | | Co | |
| Long-legged Myotis | <i>Myotis Volans</i> | | Co | |
| Yuma Myotis | <i>Myotis yumanensis</i> | | Co | |
| Fringed Myotis | <i>Myotis thysandodes</i> | | Co | M |
| Canyon Bat | <i>Parastrellus Hesperus</i> | | Co | |
| Fisher | <i>Pekania pennant</i> | Co | T | Co |
| Merriam's Shrew | <i>Sorex merriami</i> | | | C |
| Preble's Shrew | <i>Sorex preblei</i> | | | C |
| Washington Ground Squirrel | <i>Uroditellus washingtoni</i> | Co | | C |
| American Mink | <i>Vison vison</i> | | Co | |
| Gastropods | | | | |
| Dry Land Forestsnail | <i>Allogona ptychophora solida</i> | | T | |

| | | | | |
|-------------------------------------|-------------------------------------|--|----|---|
| California Floater | <i>Anadonta californiensis</i> | | T | C |
| Poplar/Cottonwood Oregonian | <i>Cryptomastix populi</i> | | E | C |
| Kingston Oregonian | <i>Cryptomastix sanburni</i> | | Co | |
| Shortface Lanx | <i>Fisherola nuttalli</i> | | Co | C |
| Columbia Pebblesnail | <i>Fluminicola Columbiana</i> | | | C |
| Ashy Pebblesnail | <i>Fluminicola fuscus</i> | | Co | |
| Salmon Coil | <i>Helicodiscus salmonaceus</i> | | T | |
| Costate Mountainsnail | <i>Oreohelix idahoensis</i> | | T | |
| Striate Mountainsnail | <i>Oreohelix strigose goniogyra</i> | | E | |
| Rotund Physa | <i>Physella columbiana</i> | | E | |
| Insects | | | | |
| Silver-bordered fritillary | <i>Boloria selene atrocotalis</i> | | | C |
| Columbia River tiger beetle | <i>Cincindela columbica</i> | | | C |
| Monarch Butterfly | <i>Danaus plexippus</i> | | T | |
| Gillette's Checkerspot | <i>Euphydryas gillettii</i> | | T | |
| Black Needlefly | <i>Perlomyia collaris</i> | | E | |
| Juniper hairstreak | <i>Mitoura grynea barryi</i> | | | C |
| Shepard's Parnassian | <i>Parnassius clodius shepardii</i> | | | C |
| Mann's Mollusk-eating Ground Beetle | <i>Scaphinotus manni</i> | | | C |
| Worms | | | | |
| Giant Palouse Earthworm | <i>Drilloleirus americanus</i> | | | C |

*Federal: E-Endangered, T-Threatened, C-Candidate, Co-Concern

**Idaho: E-Endangered, T-Threatened, Co-Concern/Sensitive

***Washington: E-Endangered; T-Threatened, C-Candidate, S-Sensitive, M-Monitored

Idaho species ranking interpretation for the above tables:

S1: Critically imperiled = Endangered

S2: Imperiled = Threatened

S3: Vulnerable = Species of Concern

S4: Apparently Secure = not listed

S5: Secure = not listed

Appendix C

Culturally Significant Plant List Associated With Corps Lands

| Common Name | Scientific Name |
|---|---|
| Alder | <i>Alnus</i> spp. |
| Arrowleaf Balsamroot | <i>Balsamorhiza sagittata</i> |
| Basin Big Sagebrush | <i>Artemisia tridentata</i> |
| Bigseed Biscuitroot | <i>Lomatium macrocarpum</i> |
| Bitter Cherry | <i>Prunus emarginata</i> Var. <i>Emarginata</i> |
| Bitterroot | <i>Lewisia rediviva</i> Var. <i>Rediviva</i> |
| Black Hawthorn | <i>Crataegus douglasii</i> |
| Black Tree/Fremont's Horsehair Lichen | <i>Bryoria fremontii</i> |
| Broadleaf Cattail | <i>Typha latifolia</i> |
| Canby's Biscuitroot | <i>Lomatium canbyi</i> |
| Carey's Balsomroot | <i>Balsamorhiza careyana</i> |
| Chokecherry | <i>Prunus virginiana</i> |
| Common Sunflower | <i>Helianthus Annuus</i> |
| Common Yarrow | <i>Achillea millefolium</i> |
| Cous/Cous Biscuitroot | <i>Lomatium cous</i> |
| Cow Parsnip | <i>Heracleum maximum</i> |
| Coyote Tobacco | <i>Nicotiana attenuata</i> |
| Coyote Willow | <i>Salix exiuga</i> |
| Douglas' Brodiaea | <i>Triteleia grandifolia</i> |
| Douglas Maple | <i>Acer glabrum</i> Var. <i>Douglasii</i> |
| Elderberry | <i>Sambucus nigra cerulea</i> |
| Fernleaf Desert-Parsley or Biscuitroot | <i>Lomatium dissectum</i> |
| Gairdner's Yampah/Indian Carrot | <i>Perideridia gairdneri</i> spp. <i>borealis</i> |
| Golden Currant | <i>Ribes aureum</i> |
| Gray's Biscuitroot or Desert-Parsley; Spring Gold | <i>Lomatium Grayi</i> Var. <i>Grayi</i> |
| Great Basin Wildrye | <i>Leymus cinereus</i> |
| Hardstem Bullrush (Tule) | <i>Schoenoplectus acutus</i> |
| Horestail | <i>Equisetum</i> spp. |
| Indian Hemp/Hemp Dogbane | <i>Apocynum cannabinum</i> |
| Indian Ricegrass | <i>Achnatherum hymenoides</i> |
| Lanceleaf Springbeauty/Indian Potatoe | <i>Claytonia lanceolata</i> |
| Lewis' Mock Orange/Syringa | <i>Philadelphus lewisii</i> |
| Manroot | <i>Marah organus</i> |
| Mule-Ears/Northern Mule-Ears | <i>Wyethia amplexicaulis</i> |
| Neatleaf Hackberry | <i>Celtis laevigata</i> Var. <i>reticulata</i> |
| Peachleaf Willow | <i>Salix amygdaloides</i> |
| Ponderosa Pine | <i>Pinus ponderosa</i> |
| Red Edlerberry | <i>Sambucus racemosa</i> |
| Redosier/Redtwig Dogwood | <i>Cornus sericea</i> |
| Rubber Rabbitbrush | <i>Ericameria nauseosa</i> |
| Russet Buffaloberry/Soopolallie/Soapberry | <i>Shepherdia canadensis</i> |
| Sagebrush Mariposa-Lily | <i>Calchortus macrocarpus</i> |

| Common Name | Scientific Name |
|------------------------------------|--|
| Saskatoon Serviceberry | <i>Amelanchier alnifolia</i> |
| Showy Milkweed | <i>Asclepias speciosa</i> |
| Slamonflower Biscuitroot | <i>Lomatium salmoniflorum</i> |
| Small/Common Camas | <i>Camissa quamash</i> |
| Starvation Prickly Pear | <i>Opuntia polyacantha</i> |
| Stinging Nettle | <i>Urtica dioica</i> |
| Tapertip/Hooker's Onion | <i>Allium acuminatum</i> |
| Thimbleberry | <i>Rubus parviflorus</i> Var. <i>Parviflorus</i> |
| Thinleaf Huckleberry | <i>Vaccinium membranaceum</i> |
| Turpentine Wavewing | <i>Pteryxia terebinthinus terebinthina</i> |
| Water Birch | <i>Betula occidentalis</i> |
| White Sagebrush | <i>Artemisia ludoviciana</i> |
| Whitebark Raspberry/Blackcap | <i>Rubus leucodermis</i> Var. <i>Leucodermis</i> |
| Wild Hyacinth/Largeflower Tritelia | <i>Triteleia grandiflora</i> |
| Woods Rose | <i>Rosa woodsii</i> Var. <i>Ultramontana</i> |
| Yellow Fritillary/Yellow Bells | <i>Fritillaria pudica</i> |
| Yellow rabbitbrush | <i>Chrysothamnus viscidiflorus</i> <i>P. t. foeniculaceus</i> |

APPENDIX C. LOWER GRANITE LOCK AND DAM LIST OF DESIGN MEMORANDA

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APPENDIX C

LOWER GRANITE LOCK AND DAM LIST OF DESIGN MEMORANDA

Table C-1. Lower Granite Lock and Dam Design Memoranda

| No. | Title | Cover Date |
|------|--|---|
| 1 | Hydrology | December 1963 |
| 2 | Upper Pool Determination | April 12, 1963 |
| 3 | General Design Memorandum (4 Volumes) Supplement 1 - Boundary Surveys and Marking Letter Supplement 2, Project Instrumentation | March 13, 1964 June 26, 1974 November 4, 1974 |
| 4 | Concrete Aggregate Investigations | January 21, 1966 |
| 5.1 | South Shore Access Road Supplement 1, Road Completion | November 18, 1965 November 13, 1969 |
| 5.2 | North Shore Access Road | December 10, 1969 |
| 6 | First-Step Cofferdam and Diversion Channel | April 5, 1965 |
| 7 | Resident Office Facilities | January 12, 1966 |
| 8 | Part 1 - Real Estate Letter Supplement 1 Part 2 - Real Estate Letter Supplement 1 Part 3 - Real Estate Part 4 - Real Estate Part 5 - Real Estate Letter Supplement 1 Letter Supplement 2 | November 3, 1964 February 25, 1966 June 30, 1965 September 29, 1970 July 8, 1966 October 27, 1966 December 1, 1967 August 14, 1968 July 2, 1971 |
| 9.1 | Grading and Drainage Camas Prairie Railroad Relocation Almota to Wawawai, and Damsite Shoofly | March 8, 1965 |
| 9.2 | Camas Prairie Railroad Relocations, including Supplement 1 | August 9, 1966 |
| 9.3 | Clearwater Bridge, Camas Prairie Railroad Supplement 1, Preliminary Designs and Cost Estimates | February 28, 1967 February 1972 |
| 10 | Permanent Operators' Quarters | June 6, 1966 |
| 11 | Deleted | |
| 12 | Relocation Whitman County Road No. 900 Supplement 1, Design and Cost Revisions | October 31, 1966 November 23, 1971 |
| 13 | Nez Perce County Roads | December 21, 1971 |
| 14 | Washington State Route 12 | March 24, 1972 |
| 14.1 | Washington State Route 129, Clarkston to Asotin | January 13, 1972 |
| 15 | Deleted | |
| 16 | Deleted | |
| 17 | Deleted | |
| 18.1 | Deleted | |

| No. | Title | Cover Date |
|------|--|---|
| 18.2 | Utility Modifications, City of Clarkston | January 15, 1971 |
| 18.3 | Utility Modifications along the Snake and Clearwater Rivers | March 27, 1972 |
| 18.4 | Utility Modifications, City of Lewiston | May 11, 1971 |
| 18.5 | Utility Modifications, City of Asotin | July 15, 1971 |
| 18.6 | Clarkston Sewage Treatment Plant | June 12, 1969 |
| 18.7 | Relocation of Power and Telephone Facilities, River Mile 108 to River Mile 117 | January 22, 1970 |
| 18.8 | Deleted | |
| 18.9 | Relocations of Hatwai Irrigation Pumping Plant | February 6, 1973 |
| 19 | Spillway | February 24, 1966 |
| 20 | Navigation Facilities Supplement 1, Miter Gate Operating Machinery Supplement 2 - Stability Analysis, Upper Gate Bay, Monolith No. 4 Supplement 3, Hydraulic Model Studies, Filling and Emptying System Revised Supplement 4, Navigation Lock Bridge | April 7, 1966 August 11, 1966 April 22, 1968 August 5, 1969 December 19, 1980 |
| 21 | Fish Facilities Supplement 1, Fish Ladder Revisions Supplement 2, Adult Fish Trapping Facilities | September 6, 1966 December 16, 1969 May 29, 1973 |
| 22 | Concrete Non-Overflows | March 30, 1966 |
| 23 | Powerplant, Letter Report Supplement 1, Design and Cost Revision Letter Report, Handrail Modifications and Fingerling Facility Walkway by SBA-8a Contract | November 1965 April 17, 1970 June 24, 1980 |
| 23.1 | Powerplant, Units 4-6, Letter Report | October 31, 1973 |
| 24 | Foundation Grouting and Drainage | June 12, 1967 |
| 25 | Deleted | |
| 26 | North Abutment Embankment and Second-Step Cofferdam | January 21, 1966 |
| 27 | Domestic Water Supply System | April 29, 1970 |
| 28A | Preliminary Master Plan Supplement 1, Land Requirements, Tammany State Park | April 2, 1965 July 2, 1971 |
| 28 | Master Plan Letter Supplement 1, Allocation of Project Lands Supplement 1, Visitors Facilities | June 4, 1974 October 1977 April 1979 |
| 28.1 | Part 1 - Temporary Marina, Tammany (Hells Gate) State Park Part 2 – Hells Gate State Recreation Area Letter Supplement 1, Contributed Funds | September 12, 1972 May 1974 December 3, 1974 |

| No. | Title | Cover Date |
|-------|--|---|
| | Letter Supplement 2, Deficiencies Correction by SBA-8a Contract | July 2, 1980 |
| 28.2 | Swallows Park and Green Belt | March 1974 Revised July 1974 |
| 28.3 | Chief Looking Glass Park | May 1974 |
| 28.4 | Chief Timothy State Park and Developments at Wilma, Wawawai, Offield Canyon , Knoxway, Blyton, and Sugarloaf | March 14, 1974 |
| 28.5 | Wawawai Bay Park | February 14, 1977 |
| 29 | Lewiston Levee Operation and Maintenance Facilities | March 8, 1974 |
| 29.1 | East Lewiston Levee Letter Supplement 1, Improvements to Lindsay Creek Intake Structure | August 4, 1972 March 14, 1980 |
| 29.2 | West Lewiston Levee | April 28, 1972 |
| 29.3 | North Lewiston Levee | September 18, 1970 |
| 29.4 | Deleted | |
| 29.5 | Clarkston Bank Protection | July 14, 1972 |
| 29.6 | Concrete Aggregate Investigation Levee Area | July 13, 1972 |
| 29.7 | Levee Beautification Supplement 1, Land Acquisition Adjustments Supplement 2, Pedestrian Underpass Location Change | May 1972 November 30, 1972 February 6, 1973 |
| 29.8 | Levee Instrumentation | February 26, 1973 |
| 29.9 | Washington Water Power Tailrace Plug Dike | June 13, 1972 |
| 29.10 | Modification, Clarkston Golf Course | April 11, 1973 |
| 30 | Aircraft Landing Strip | October 12, 1965 |
| 31 | Buildings, Landscaping, and Grounds | |
| 32 | Architectural Treatment | November 16, 1965 |
| 33 | Lake Clearing | January 22, 1974 |
| 34 | Debris Disposal Facilities Part A – Feasibility Study Part B – Trash Shear Boom at Powerhouse Intake Part C – Feature DM, Trash Shear Booms on Upper Reservoir Part D – Debris Removal and Disposal Facilities | January 1983 December 1982 Revised April 1983 |
| 35 | Offield Bar Cemetery | February 14, 1967 |
| 36 | Isolated Burials at Silcott | September 11, 1968 |
| 37 | CPRR and State Route Realignment, Steptoe to Wilma | November 5, 1970 |
| 38 | Removal of Spillway, Washington Water Power Company Dam | April 18, 1972 |
| 39 | Lake Sedimentation Ranges | May 30, 1975 |

| No. | Title | Cover Date |
|-----|--|------------------------------|
| 40 | Cost Allocation | August 1976 |
| 41 | Lewiston-Clarkston Bridge Letter Supplement 1, 16th Avenue Approach, Clarkston, Washington | October 1978 January 1984 |
| 42 | Feature Design, Revised Turbine Intake Screening System | December 2001 |
| 43 | Feature Design: Juvenile Bypass/Holding and Loading Facilities | June 1996 |

Table C-2. Lower Snake River Fish and Wildlife Compensation Plan Design Memoranda

| Title* | Date |
|--|--------------|
| Design Memorandum for Wildlife Habitat Development on Project Lands, Lower Snake River Project | January 1975 |
| Special Report – Lower Snake River Fish and Wildlife Compensation Plan, Snake River, Washington and Idaho | June 1975 |
| Design Memorandum for Wildlife Habitat Development, Supplement 1, Lower Snake River Project | April 1979 |
| Special Report for Congress, Lower Snake River Fish and Wildlife Compensation Plan | March 1983 |
| Design Memorandum No. 20 - Game Bird Farm Alternative, Habitat Development | April 1986 |
| Design Memorandum for Wildlife Habitat Development, Supplement 2, Hell's Gate Habitat Management Unit | October 1987 |
| Special Report – Wildlife Habitat Compensation Evaluation for the Lower Snake River Project | June 1991 |
| Interim Report, Supplement to Special Report, Lower Snake River Fish and Wildlife Compensation Plan, Lower Snake River, Washington and Idaho | April 1996 |

*All of the documents listed in this table are either unnumbered Design Memoranda or special reports, except for Design Memorandum No. 20.

APPENDIX D. LAND CLASSIFICATION MAPS

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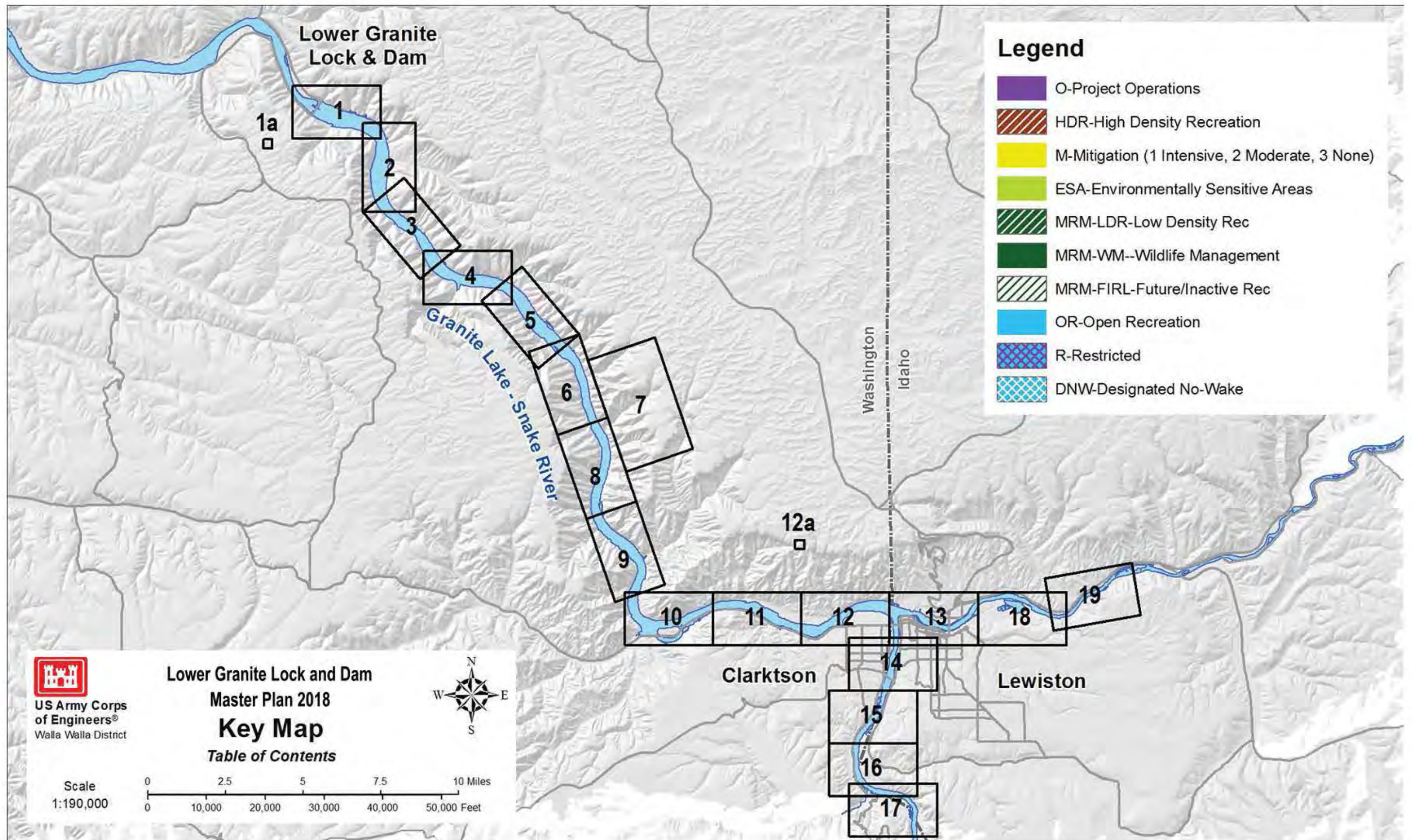
APPENDIX D

LAND CLASSIFICATION MAPS

The land classifications for the 2018 Lower Granite Lock and Dam Master Plan, as described in Section 4.2.2 of the main document, are shown in the following series of 19 maps and one key map.

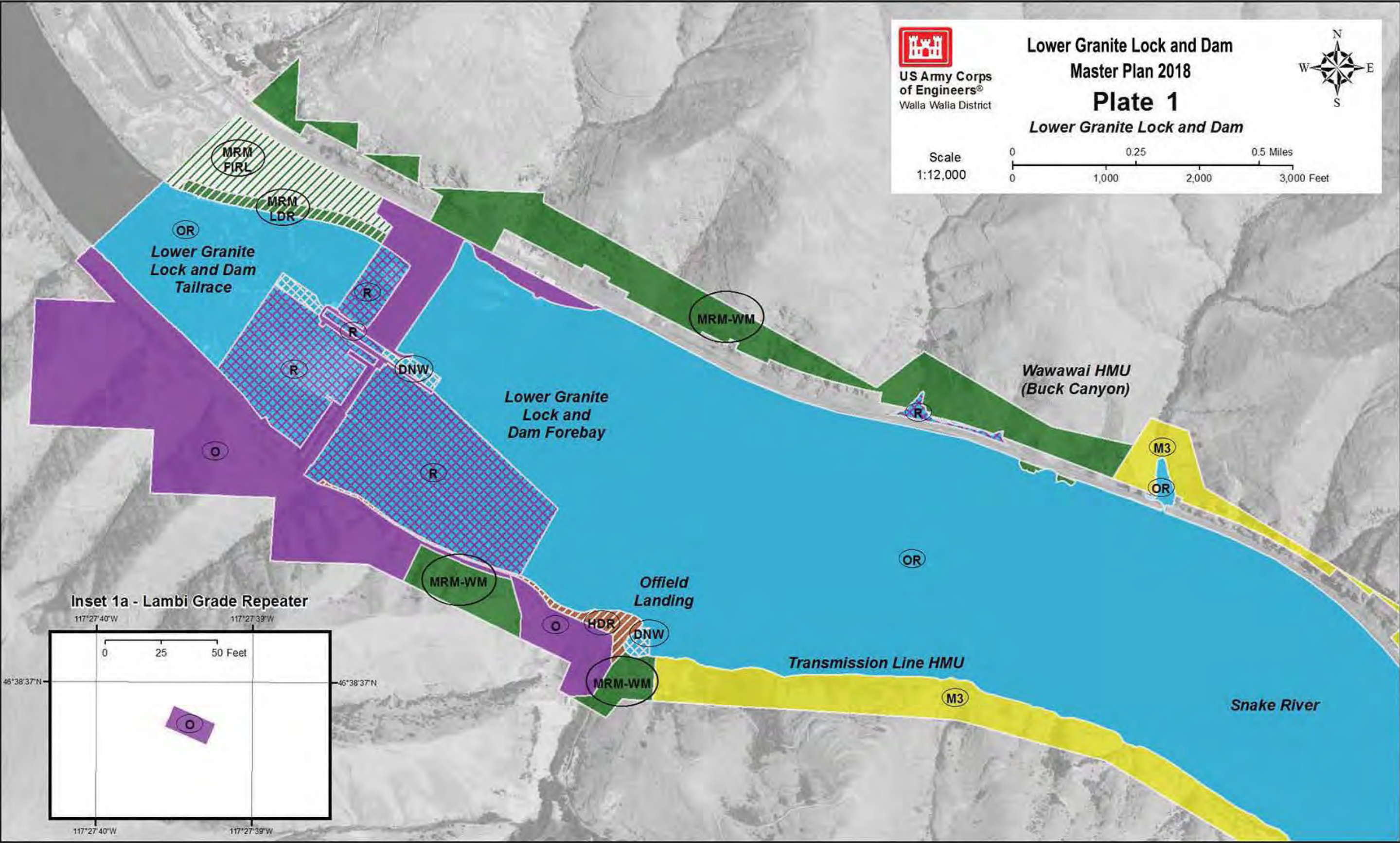
The key map shows how the Lower Granite Lock and Dam area was divided into segments to better display areas at a suitable scale. The legend contains a color code for each land classification.

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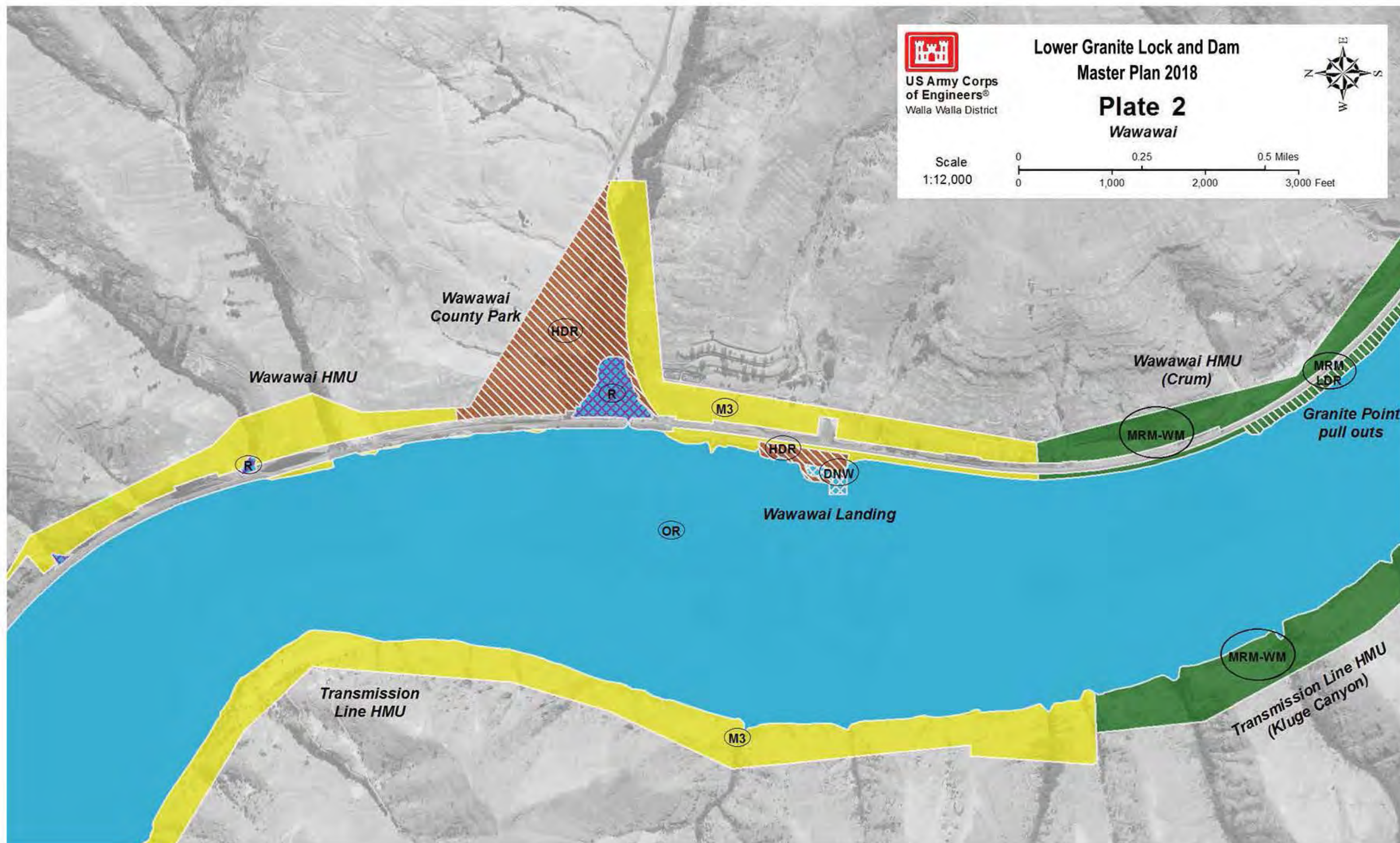


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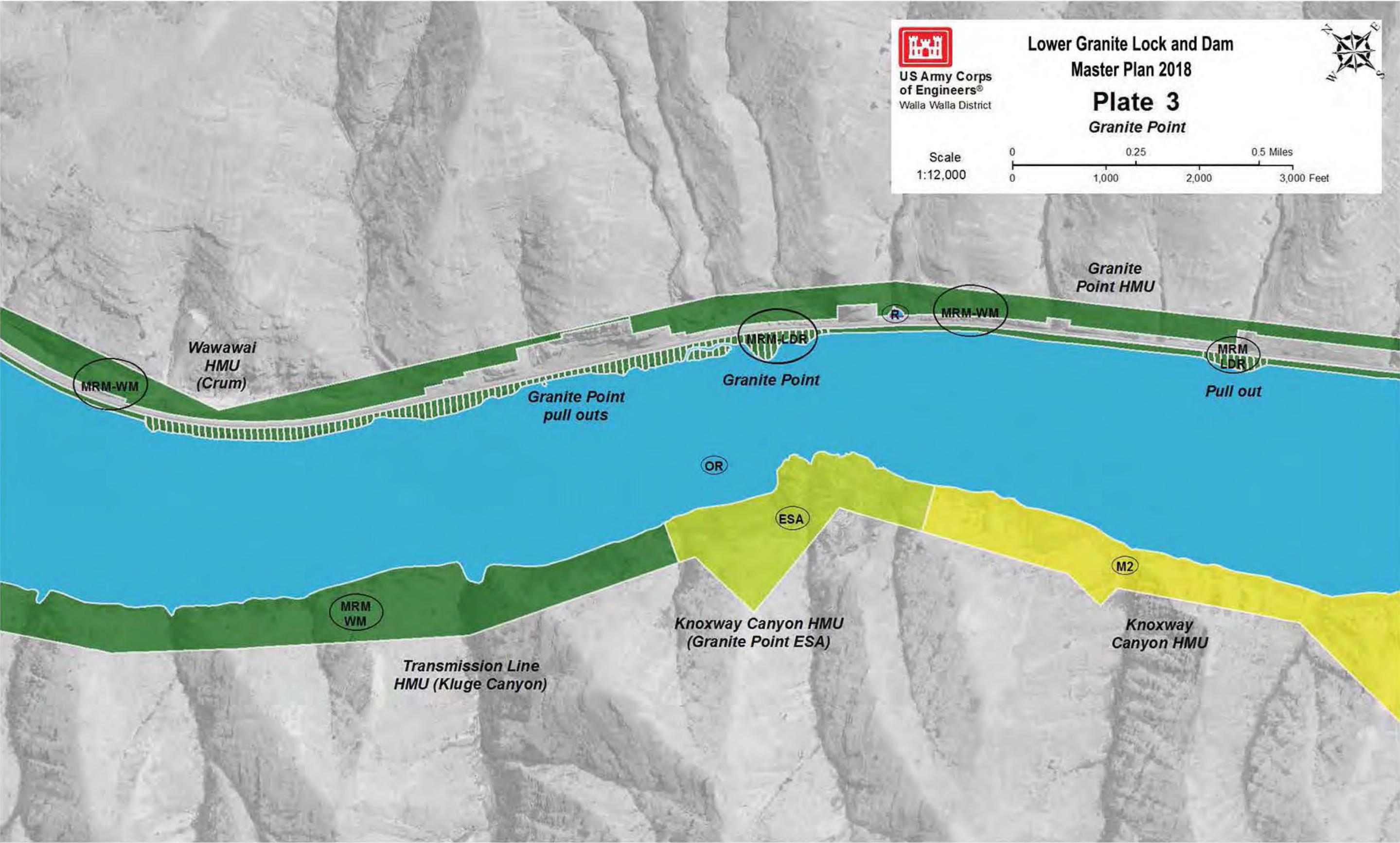


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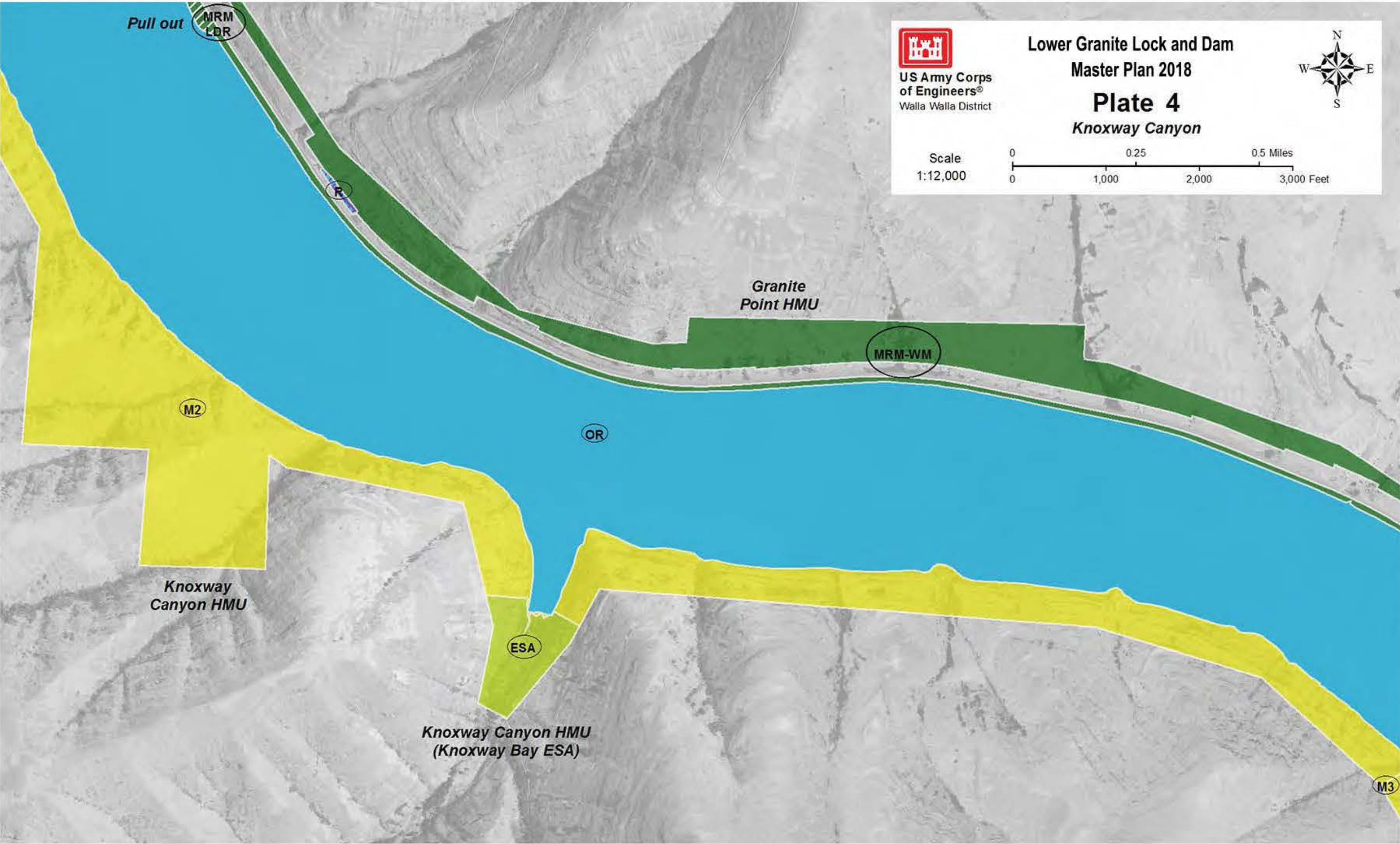


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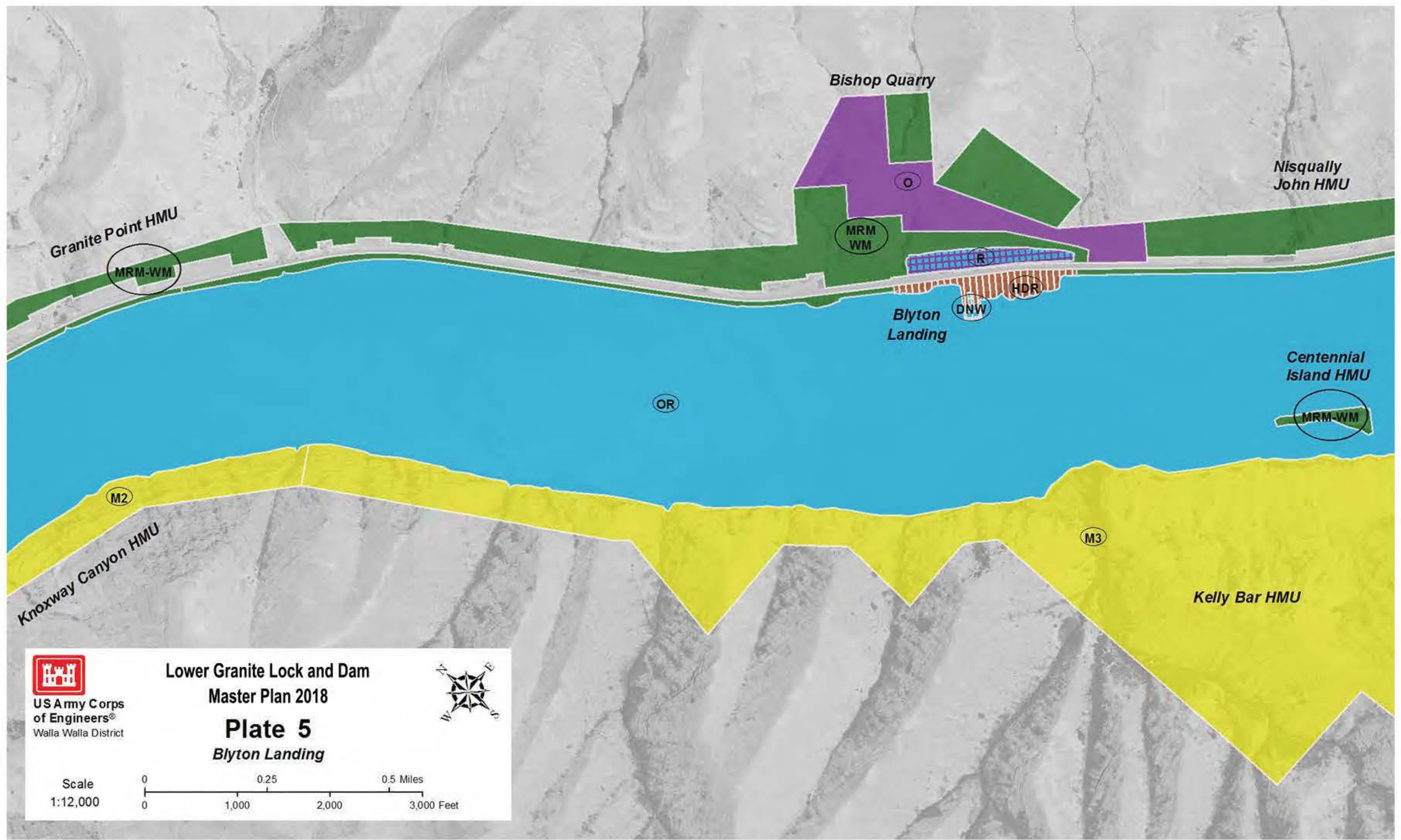


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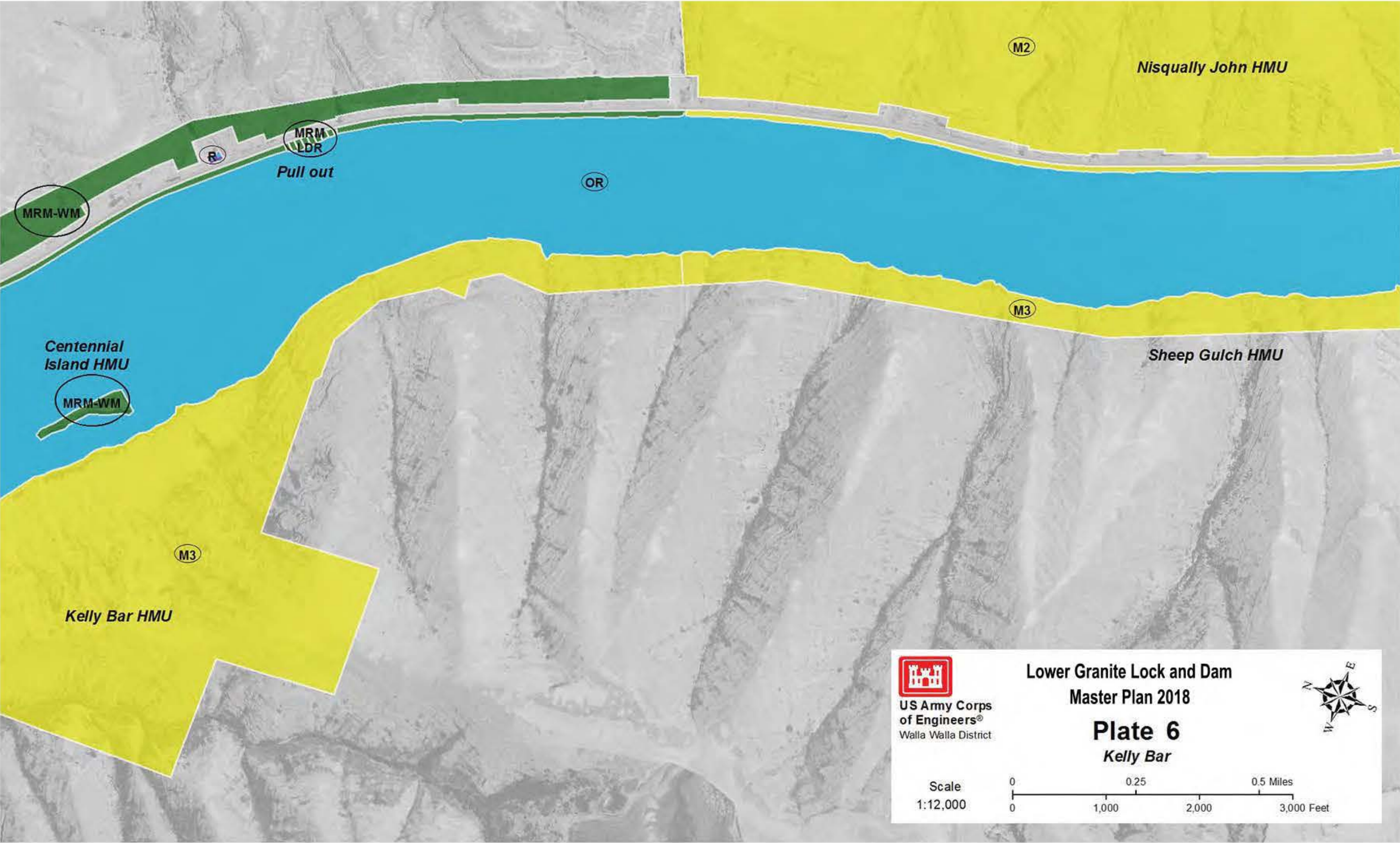


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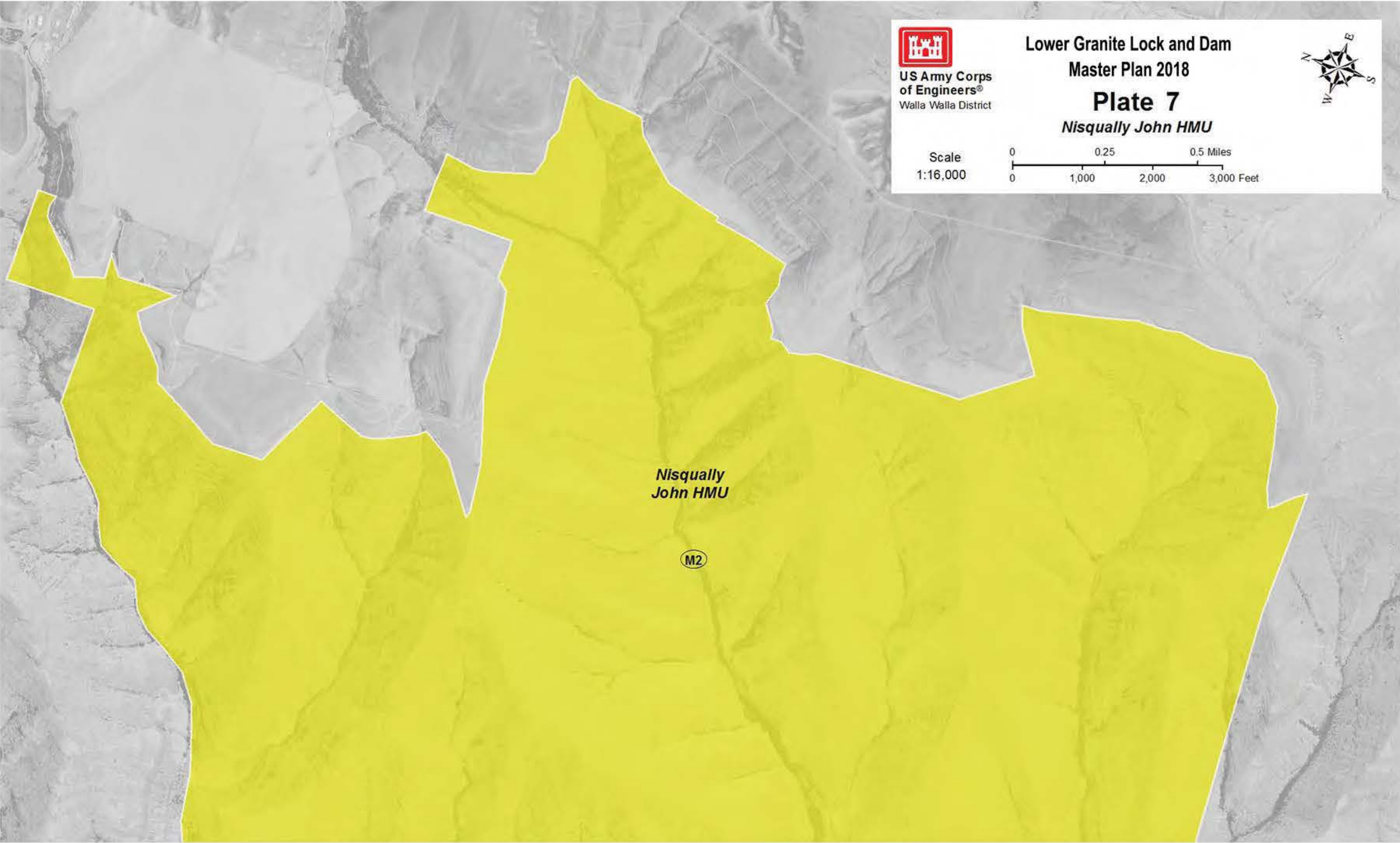


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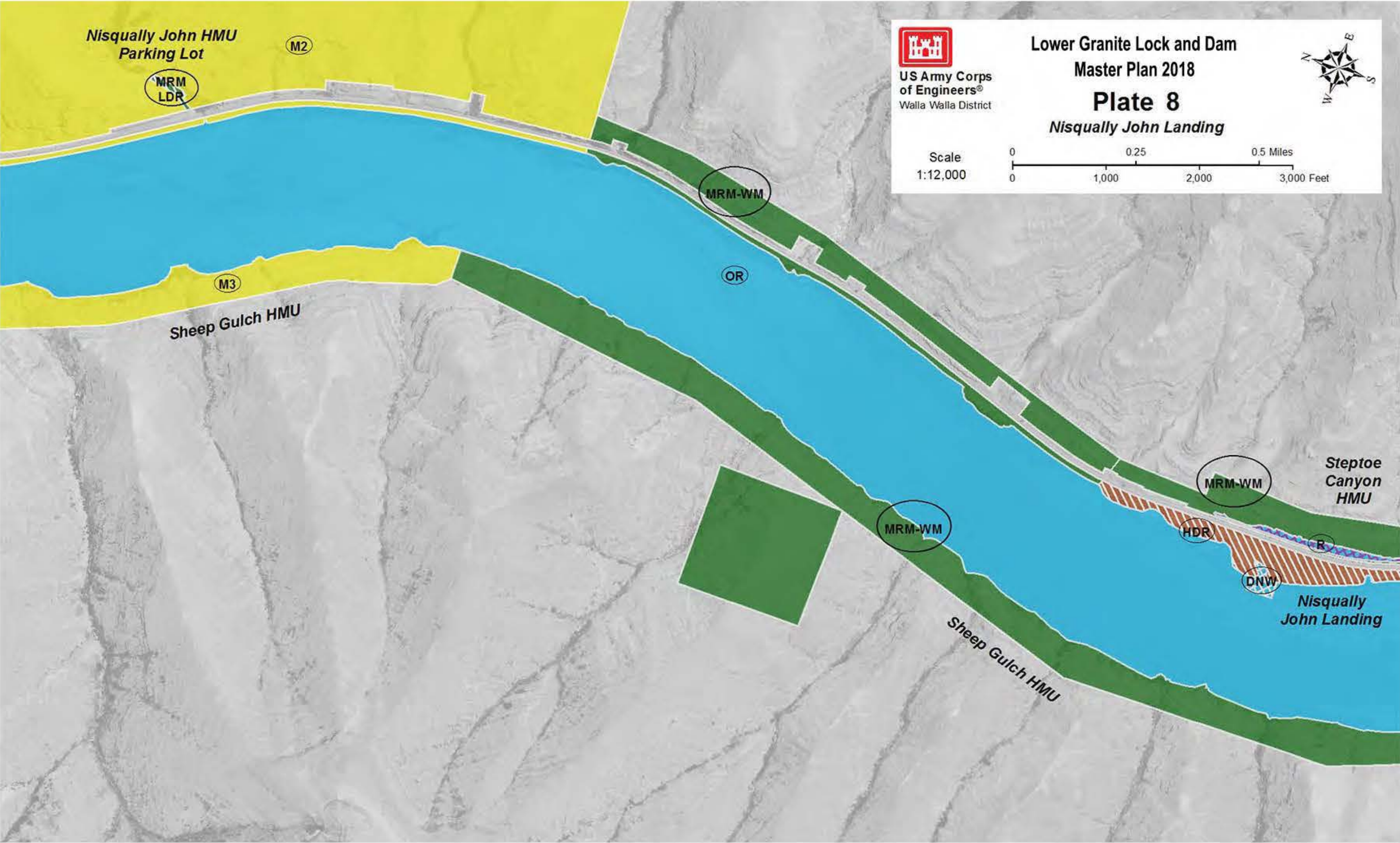


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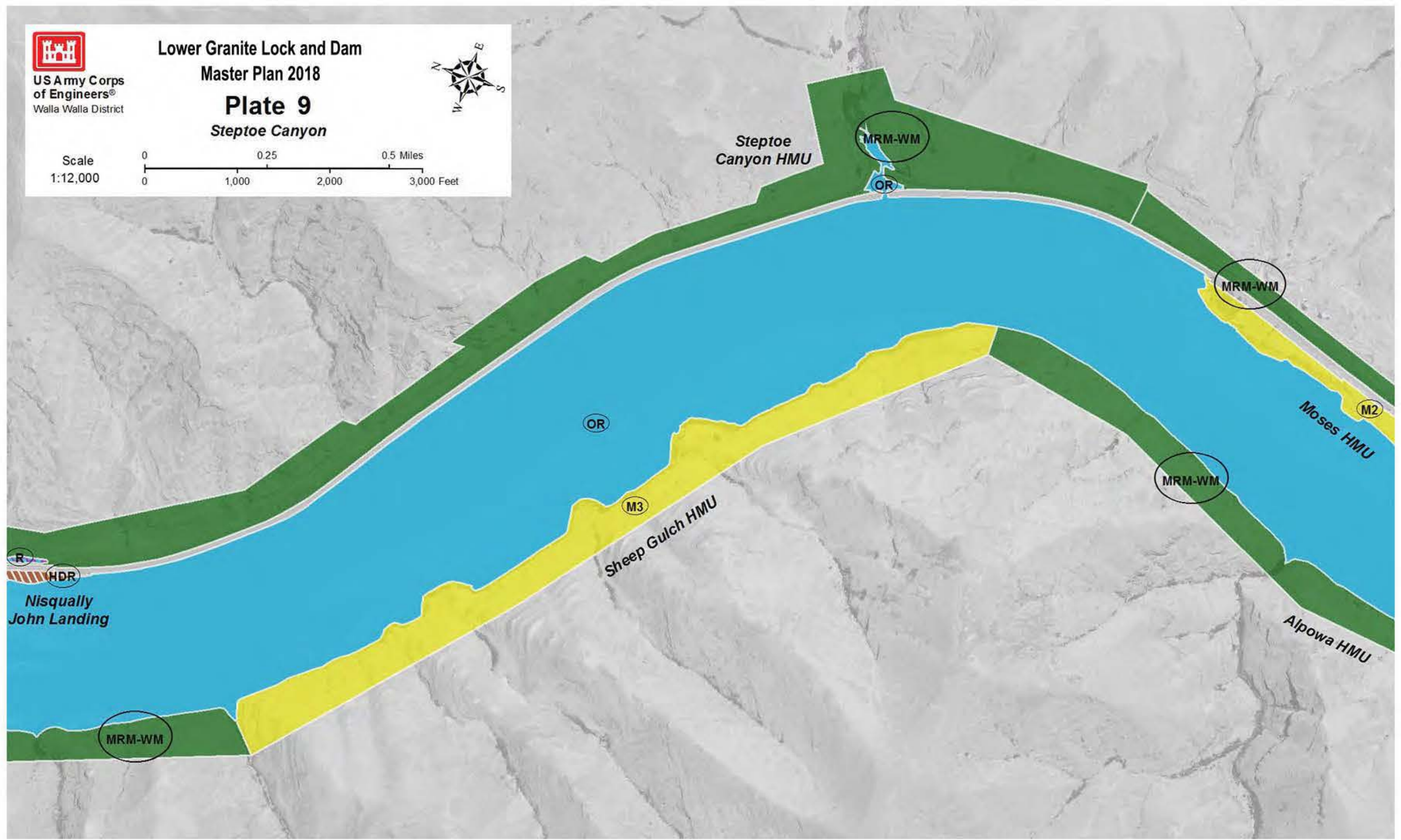


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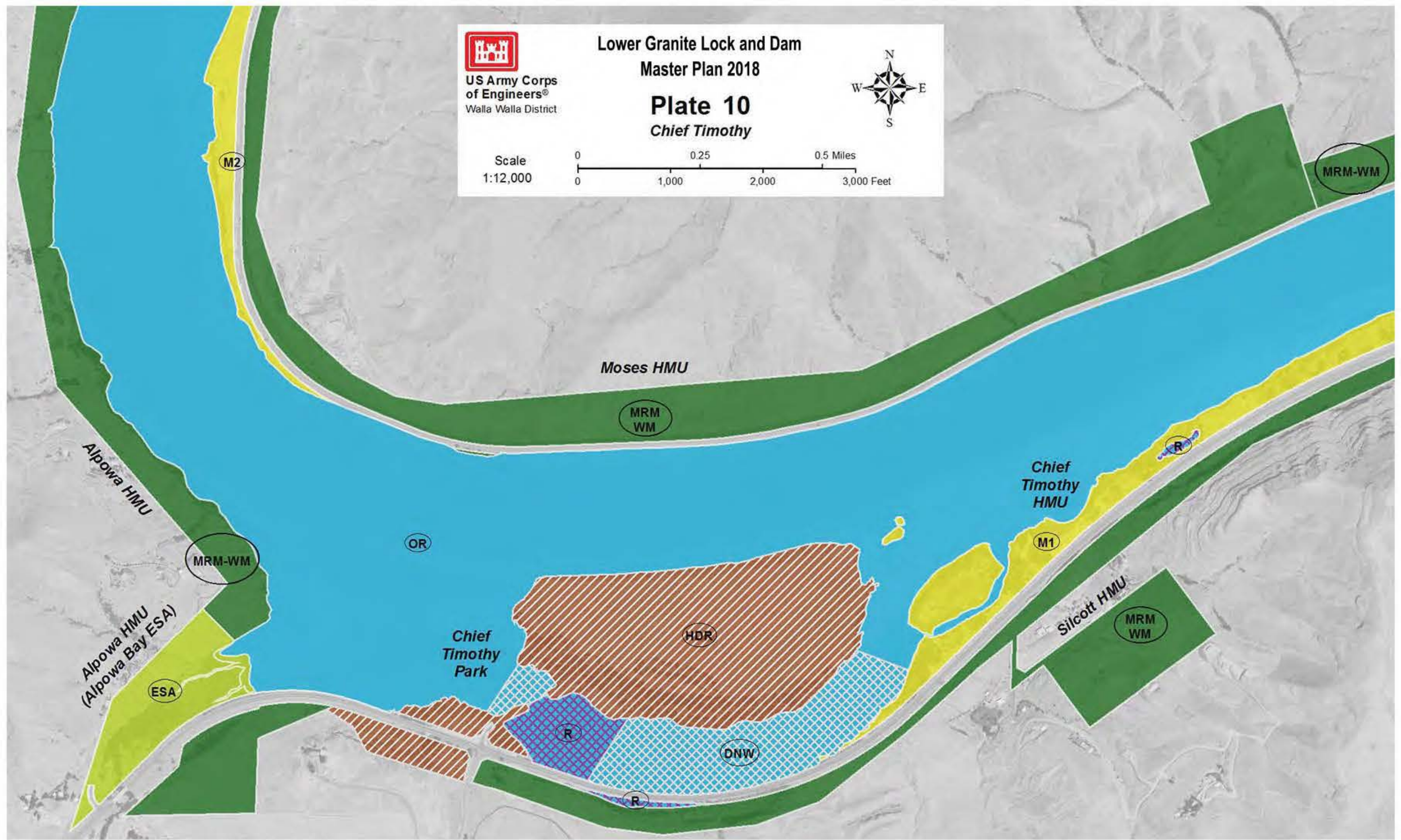


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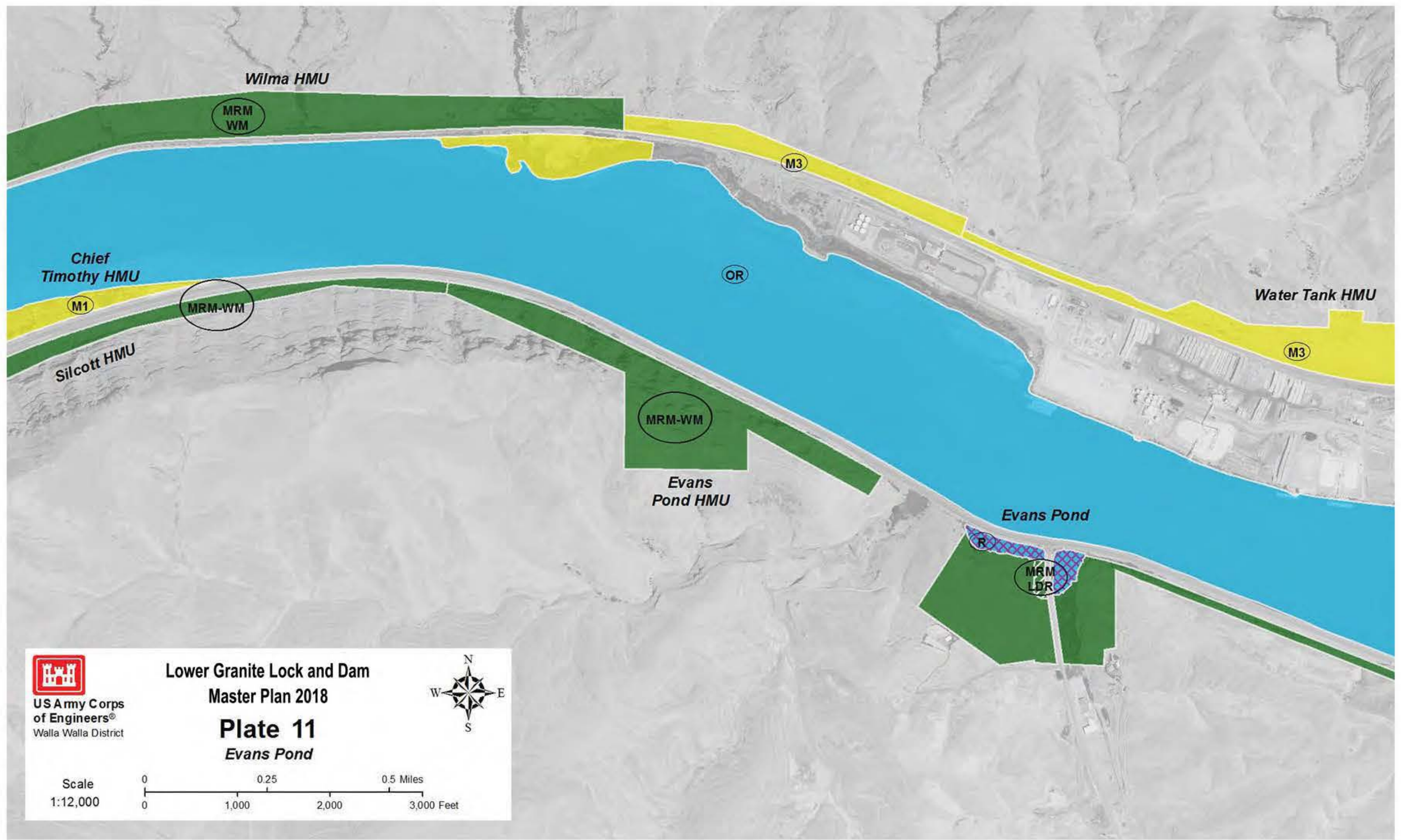


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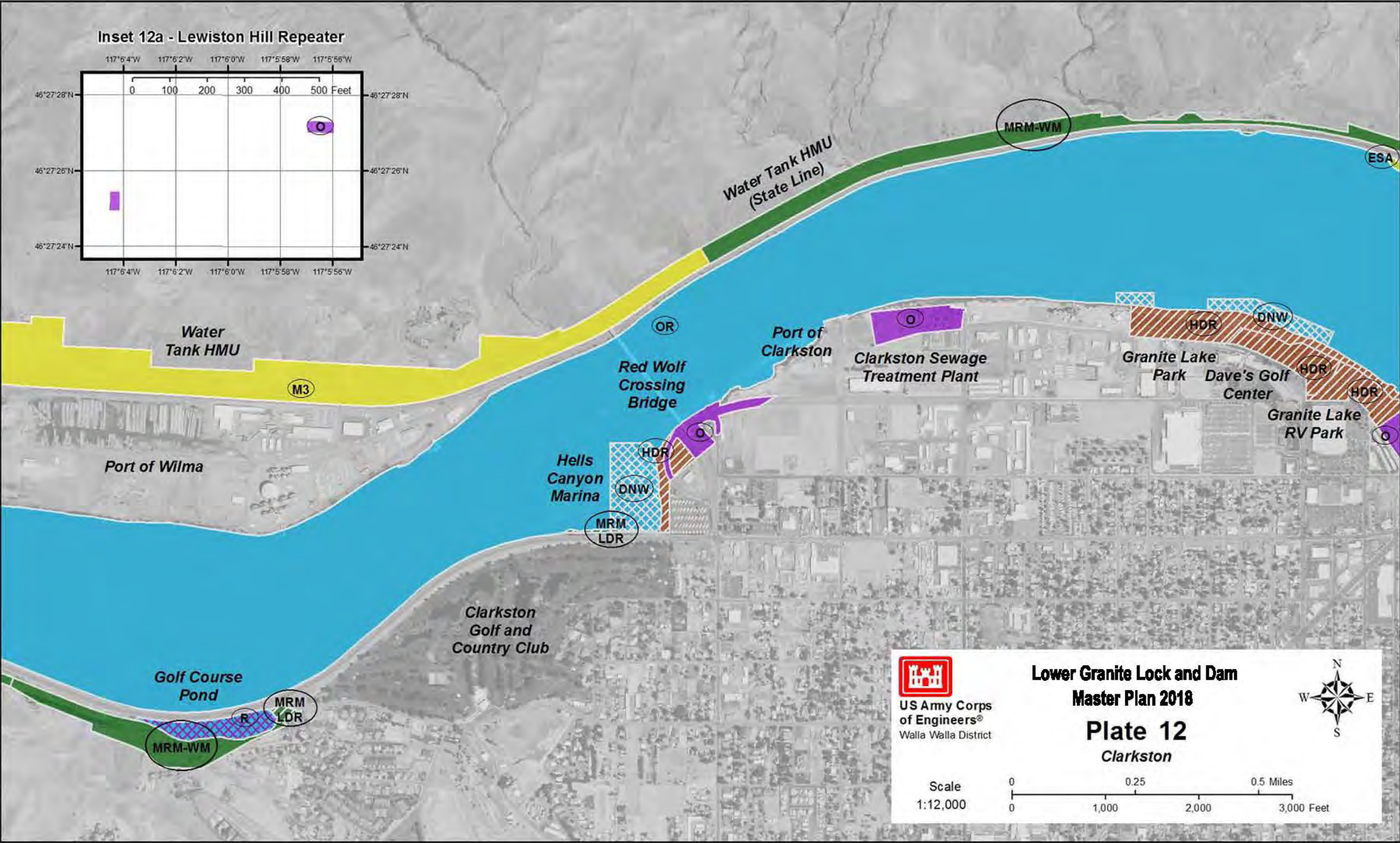


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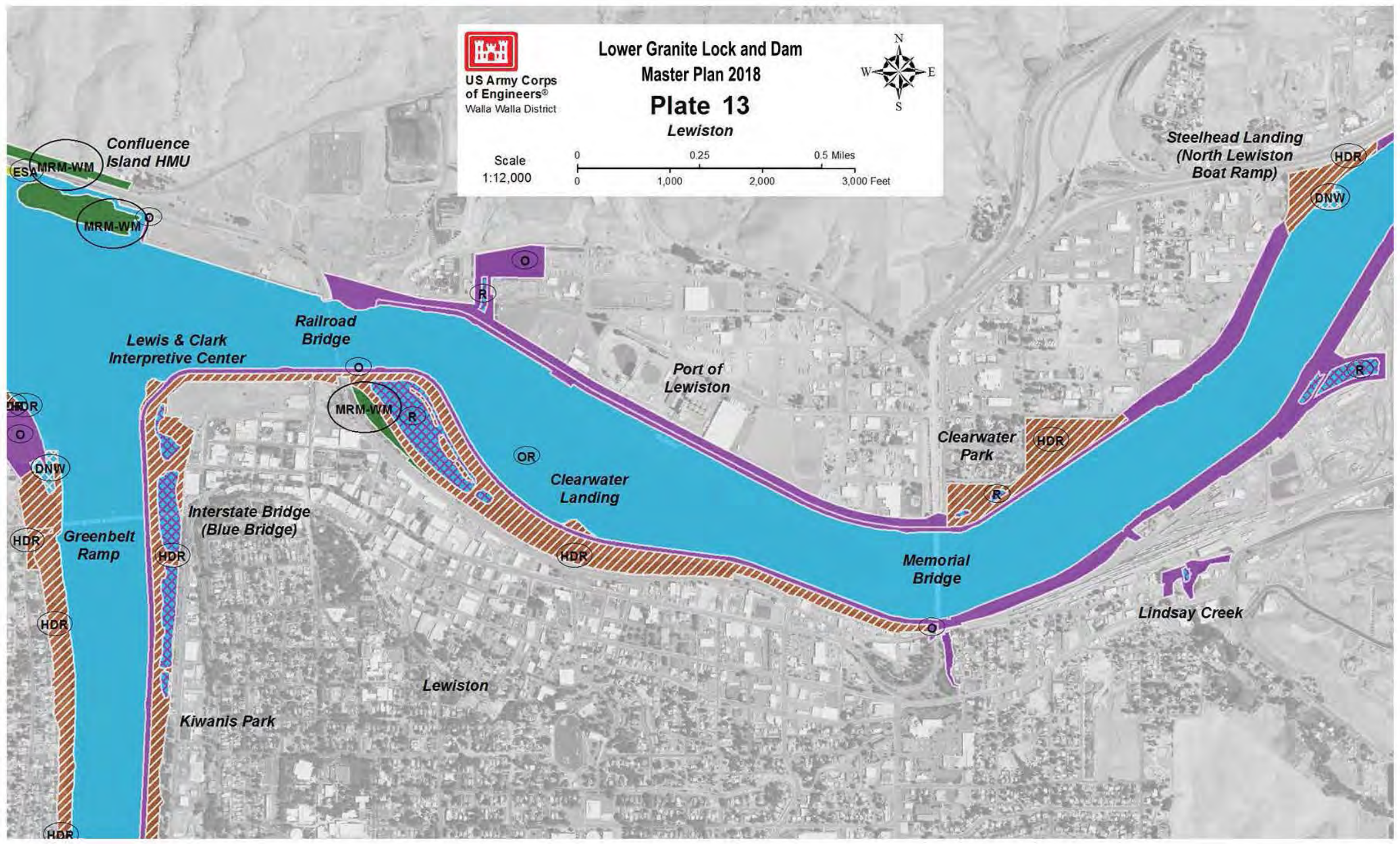


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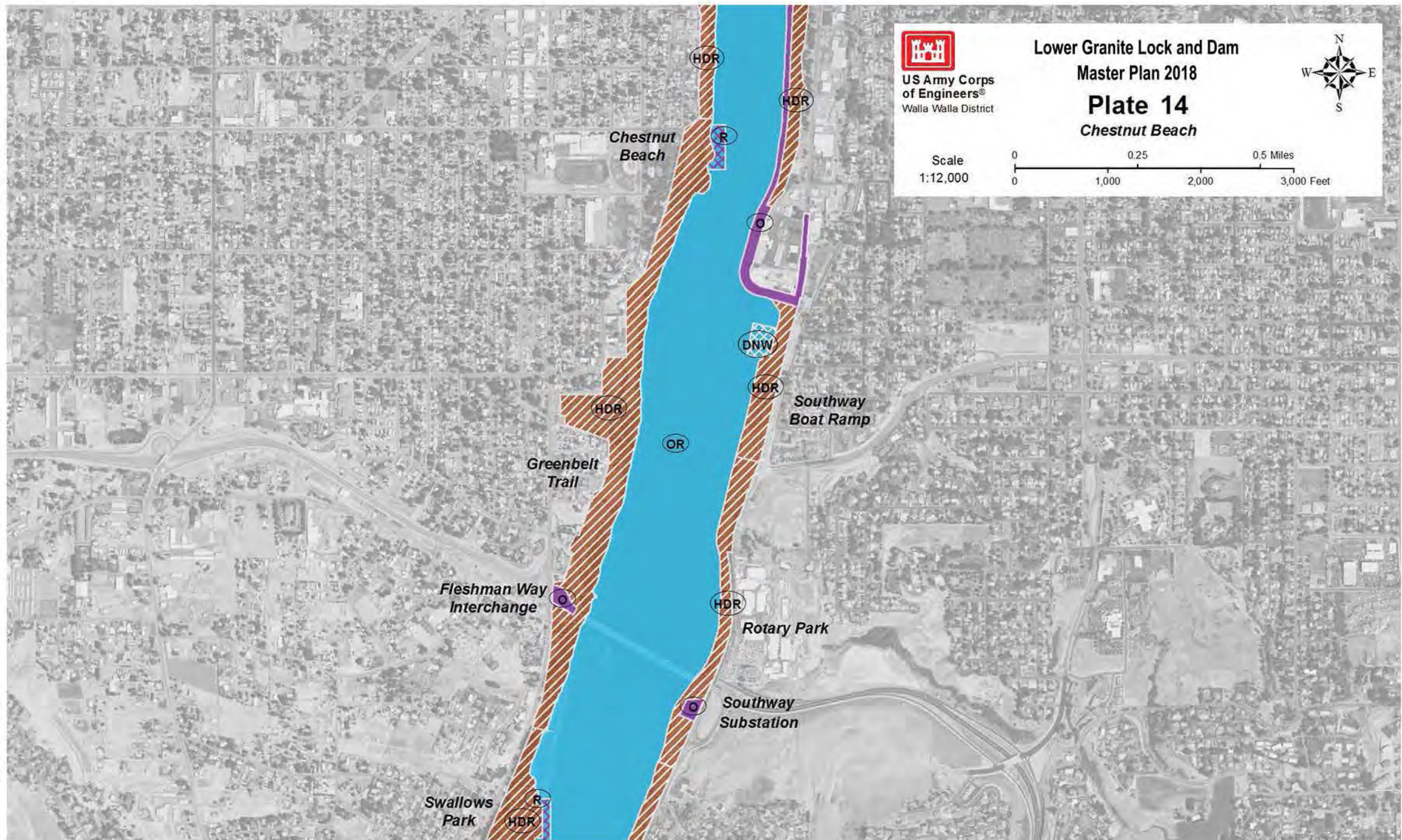


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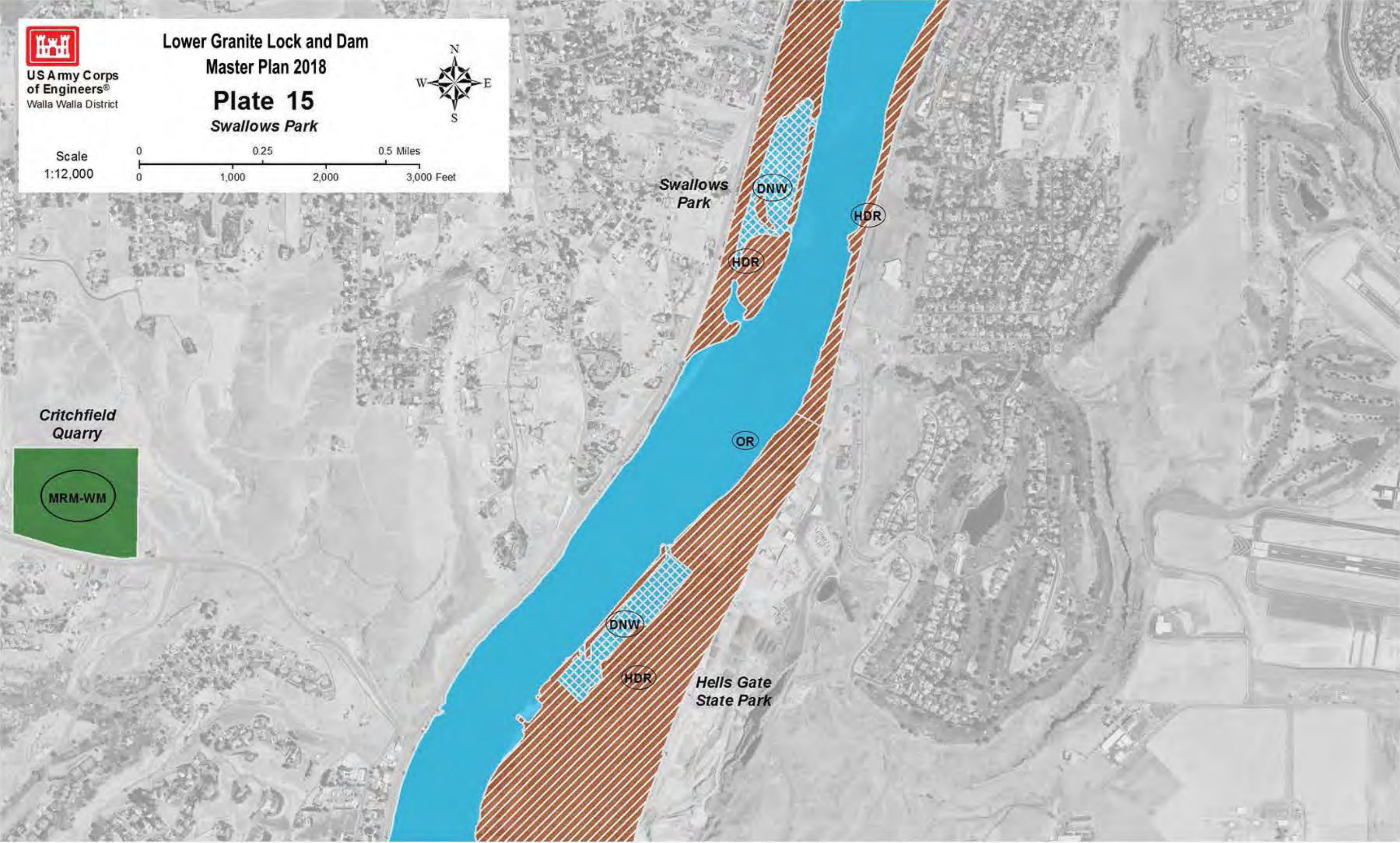


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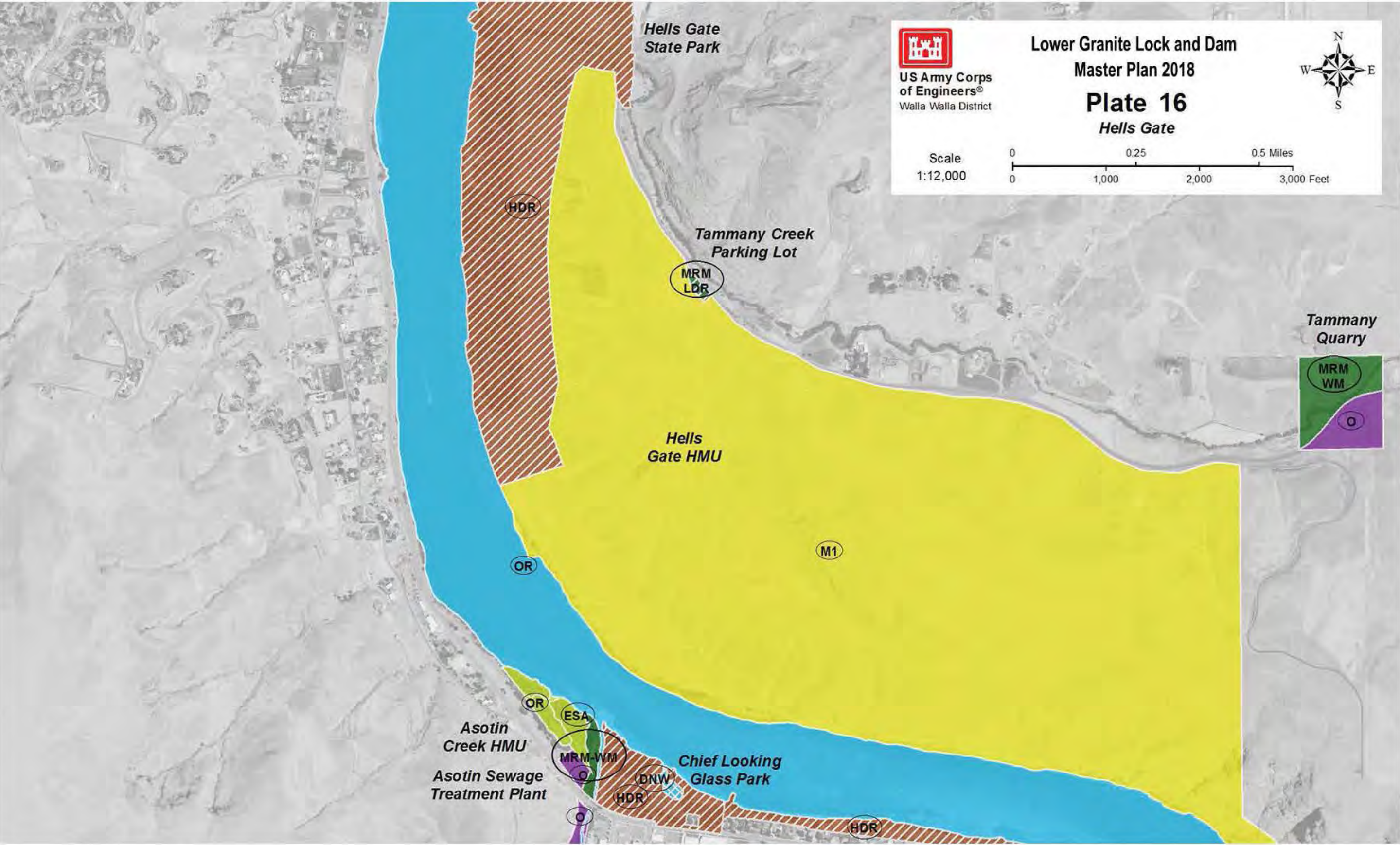


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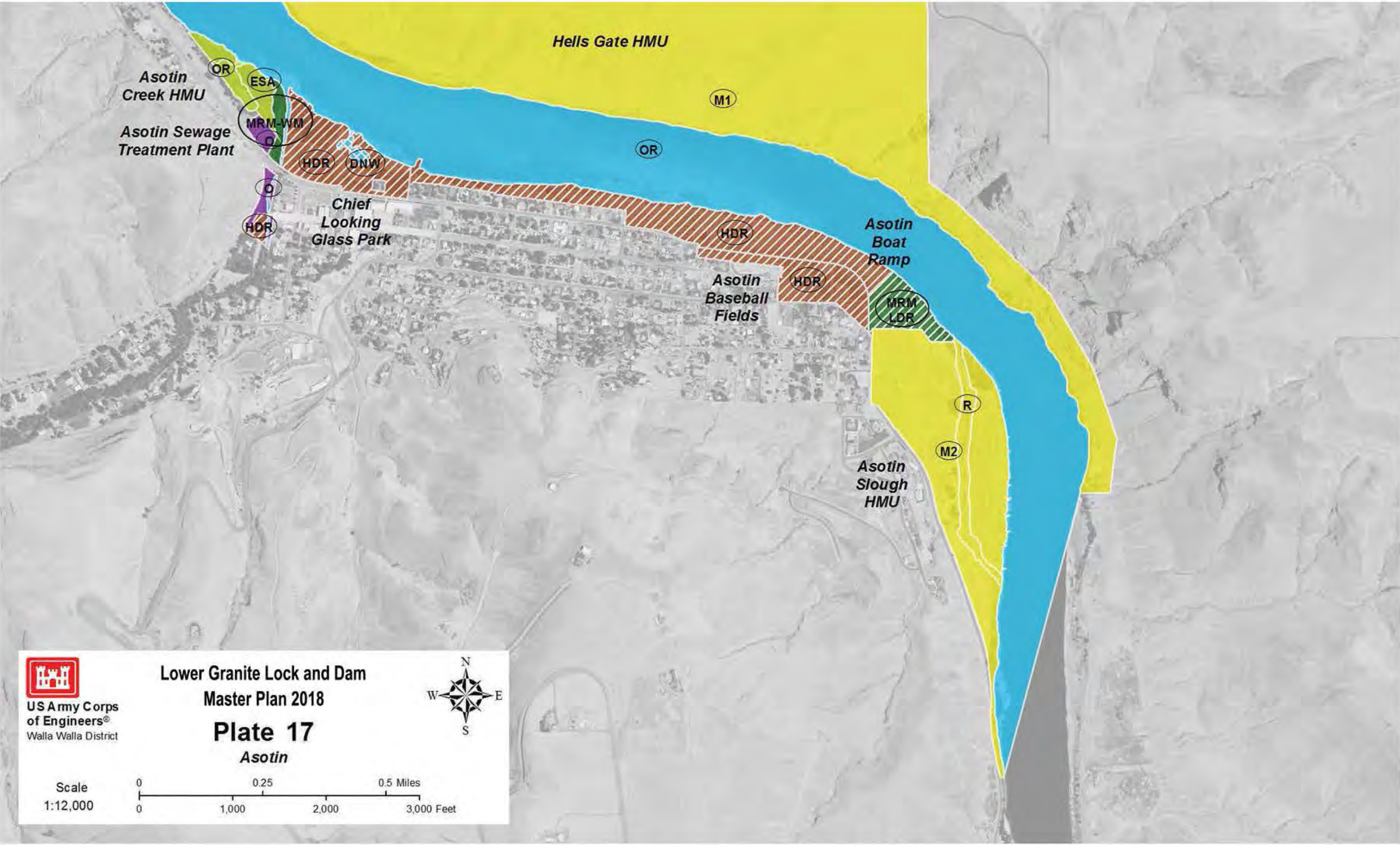


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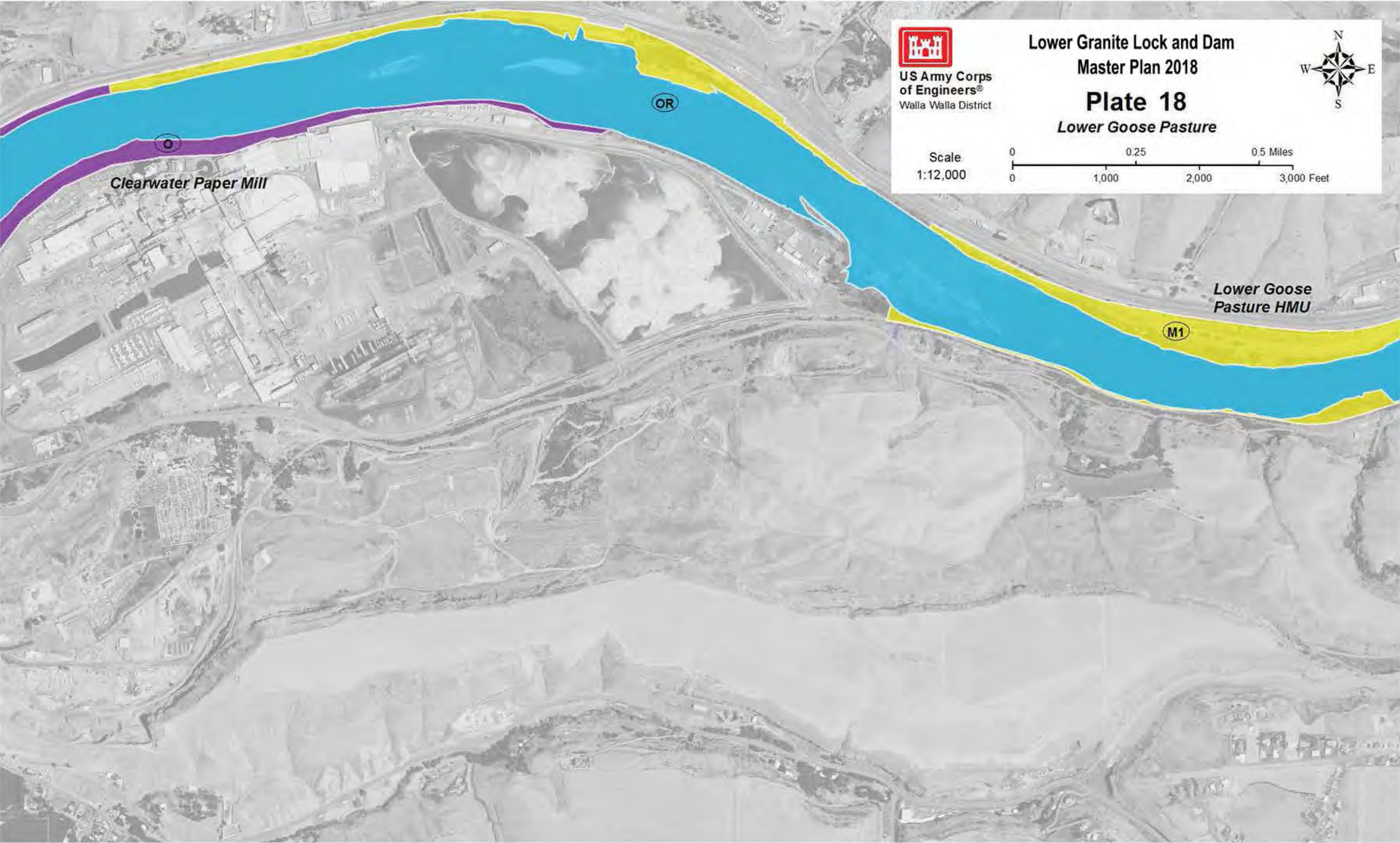


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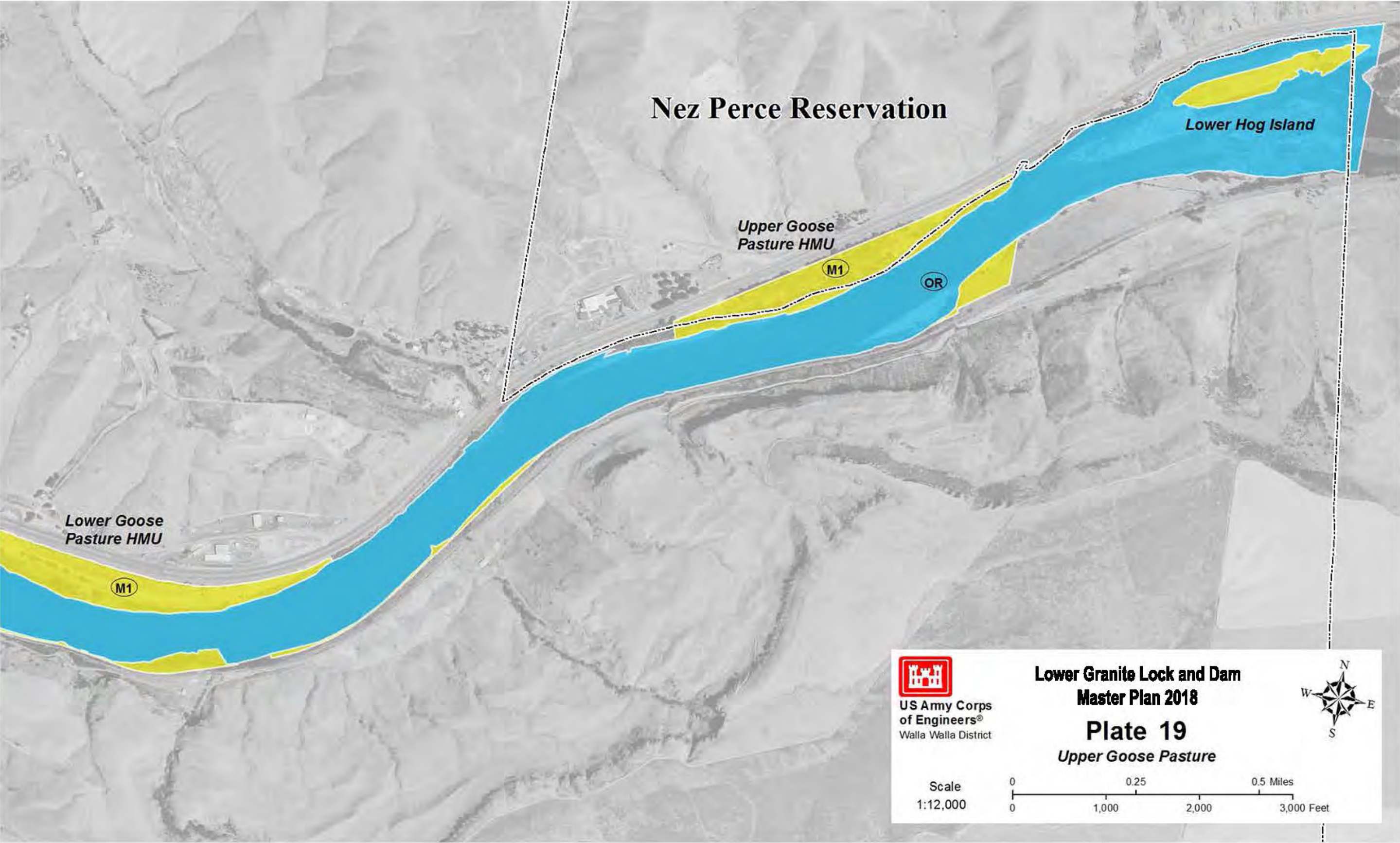


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APPENDIX E. DETAILED LAND CLASSIFICATION CHANGES

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APPENDIX E

DETAILED LAND CLASSIFICATION CHANGES

The following tables list each land management area and shows how land classifications have changed from 2017 to the 2018 Master Plan. A reason for each change is also included. Both tables contain the same data but are sorted differently. Table E-1 is sorted by the previous land classification and shows what that land classification has been changed to for the 2018 Master Plan. Table E-2 is sorted by the updated land classification and shows what that land classification was originally. Figure E-1 is a map showing each land classification change and its location with Lower Granite Lock and Dam lands.

The following land classification acronyms are used in this table:

O = Project Operations; HDR = High Density Recreation; M = Mitigation; ESA = Environmentally Sensitive Areas; MRM = Multiple Resource Management; LDR = Low Density Recreation; WM = Wildlife Management; VM = Vegetation Management; and FIRA = Future or Inactive Recreation Areas.

Table E-1. Land Classification Changes Sorted by Previous Land Classification

| Management Areas | Land Classification | | Acres | Reason For Change |
|--------------------------------------|---------------------|-----------------------------|--------|--|
| | FROM (2017) | TO (2018 Master Plan) | | |
| Changed from Project Operations | | | | |
| Bishop Quarry canyon and highlands | O | MRM-WM | 46.36 | Resized operation classification to match quarry area with residual going to WM |
| Boyer Park Expansion | O | MRM-FIRA | 11.59 | Proposed future park expansion area |
| Critchfield Quarry | O | MRM-WM | 33.47 | Quarry not utilized and land suitable for WM |
| Dam to Offfield Shoreline | O | HDR | 0.71 | Changed to accommodate fishing area along shore |
| Evans Pond Hillside | O | MRM-WM | 19.05 | Originally designated Ops for highway construction. Area now suitable for wildlife |
| Hells Canyon Marina | O | HDR | 2.21 | Area converted to parking lot and boat launch for marina |
| Lower Granite North Shore Tailrace | O | MRM-LDR | 3.94 | Converted to camping and fishing multipurpose area |
| Moses Quarry | O | MRM-WM | 30.72 | Area no longer used as quarry, suitable for WM |
| Silcott Quarry | O | MRM-WM | 36.47 | Area no longer used as quarry, suitable for WM |
| | TOTAL | | 184.52 | |
| Changed from High Density Recreation | | | | |
| Asotin Creek (between bridges) | HDR | O | 1.77 | Area is encompassed by road and levee not suitable for Recreation |
| Fleshman Way Interchange | HDR | O | 1.00 | Area is a bridge abutment; not suitable for Recreation |
| Hells Gate HMU | HDR | M | 113.06 | Hells gate bench area is part of the wildlife Mitigation lands for the LSRFWCP |

| Management Areas | Land Classification | | Acres | Reason For Change |
|---|---------------------|-----------------------|-------|--|
| | FROM (2017) | TO (2018 Master Plan) | | |
| Memorial Bridge Partition Dike - south shore | HDR | O | 0.26 | Area is part of levee operations; not suitable for Recreation |
| Moses ORV Park (future but undeveloped) | HDR | MRM-WM | 39.37 | ORV area never developed due to steep terrain; better suited to WM |
| Offfield Landing (uphill) | HDR | MRM-WM | 7.17 | Land too steep to develop for recreation; more suitable for WM |
| Substation road intersection | HDR | O | 0.37 | Area encompasses road between BPA substation and road |
| Wawawai Bay south hillside | HDR | M | 18.89 | Land too steep to develop for recreation, more suitable for WM |
| | TOTAL | | 181.9 | |
| Changed from Environmentally Sensitive Areas | | | | |
| Granite Point | ESA | MRM-LDR | 2.97 | High visitation warrants LDR classification |
| Retain ESA for WT monument | ESA | ESA | 0.74 | Washington Territory Monument- historical area |
| Water Tank HMU | ESA | MRM-WM | 5.88 | Excess area originally part of WT monument- but entire land was not required to protect monument |
| | TOTAL | | 9.59 | |
| Changed from Mitigation | | | | |
| Hells Gate HMU Tammany Entrance | M | MRM-LDR | 0.83 | Parking lot and access point to Hells Gate Park |
| | TOTAL | | 0.83 | |
| Changed from MRM-Low Density Recreation | | | | |
| Asotin Baseball Fields | MRM-LDR | HDR | 12.25 | Irrigated ball parks, highly developed recreation area |
| Asotin Boat Ramp | MRM-LDR | HDR | 30.49 | Vault toilet, boat ramp, heavy recreation usage |
| Asotin Slough HMU (downstream end) | MRM-LDR | M | 17.03 | Part of Lower Snake River Fish and Wildlife Compensation Plan wildlife mitigation |
| Elks Club shoreline trail | MRM-LDR | HDR | 18.74 | Trail system between Hells gate and City of Lewiston |
| Greenbelt Ramp | MRM-LDR | HDR | 38.00 | Area part of developed ramp and trail system |
| Hells Gate HMU | MRM-LDR | M | 23.14 | Part of Lower Snake River Fish and Wildlife Compensation Plan wildlife mitigation |
| Knoxway Canyon ESA | MRM-LDR | ESA | 18.46 | Swallows Beach Mitigation Project with Washington Department of Ecology |
| Knoxway Canyon Recreation Area | MRM-LDR | M | 27.21 | Recreation area never developed connecting property already mitigation area |
| Lewiston Grain Growers - Snake River Ave and Levee Embankment | MRM-LDR | O | 3.20 | Road and base of levee |
| Rotary Park | MRM-LDR | HDR | 13.04 | Developed park, high public usage |

| Management Areas | Land Classification | | Acres | Reason For Change |
|---|---------------------|-----------------------|--------|---|
| | FROM (2017) | TO (2018 Master Plan) | | |
| Rotary Park (southway boat ramp) | MRM-LDR | HDR | 8.92 | Southway boat ramp, paved, restroom; high public usage |
| Southway Substation | MRM-LDR | O | 0.88 | Operation for AVISTA sub station |
| | TOTAL | | 211.36 | |
| Changed From MRM–Wildlife Management | | | | |
| Alpowa Creek ESA | MRM-WM | ESA | 36.37 | Swallows Beach Mitigation Project with Washington Department of Ecology |
| Asotin Slough HMU | MRM-WM | M | 45.93 | Swallows Beach Mitigation Project with Washington Department of Ecology |
| Dam to Offfield Shoreline | MRM-WM | HDR | 0.47 | Shoreline used for fishing access, high public usage |
| Evans Pond Parking Lot | MRM-WM | MRM-LDR | 1.16 | Public access to fishing; vault toilet, parking lot, high usage |
| Golf Course Pond Parking Lot | MRM-WM | MRM-LDR | 0.67 | Public access to fishing; vault toilet, parking lot, high usage |
| Goose nesting island downstream of Granite Point | MRM-WM | MRM-LDR | 0.97 | Area adjacent to public picnic and camping site |
| Hells Canyon Marina | MRM-WM | HDR | 1.47 | Part of Marina, high public usage |
| Hells Canyon Marina South Shoreline | MRM-WM | MRM-LDR | 0.54 | Picnic and fishing access on shoreline |
| Nisqually John HMU Parking Lot | MRM-WM | MRM-LDR | 0.81 | Parking lot and access point to HMU |
| Wawawai Landing (Pull outs downstream of Granite Point) | MRM-WM | MRM-LDR | 13.55 | Campsite areas between highway and Lower Granite Lake |
| Road between Lower Granite Dam and substation | MRM-WM | O | 1.22 | Area at BPA substation and road |
| | TOTAL | | 103.16 | |
| Changed From MRM–Vegetation Management | | | | |
| Buck Canyon (downstream of Wawawai) | MRM-VM | MRM-WM | 81.07 | VM is a subcategory under Wildlife management and is managed under MRM |
| Evans Pond HMU | MRM-VM | MRM-WM | 61.46 | VM is a subcategory under Wildlife management and is managed under MRM |
| Golf Course Pond HMU | MRM-VM | MRM-WM | 2.98 | VM is a subcategory under Wildlife management and is managed under MRM |
| Granite Point HMU | MRM-VM | MRM-WM | 186.86 | VM is a subcategory under Wildlife management and is managed under MRM |
| Nisqually John HMU | MRM-VM | MRM-WM | 11.05 | VM is a subcategory under Wildlife management and is managed under MRM |
| Nisqually John HMU | MRM-VM | MRM-WM | 38.05 | VM is a subcategory under Wildlife management and is managed under MRM |

| Management Areas | Land Classification | | Acres | Reason For Change |
|---|---------------------|-----------------------|--------|---|
| | FROM (2017) | TO (2018 Master Plan) | | |
| Nisqually John Shoreline Frontage | MRM-VM | M | 200.84 | Nisqually John is a mitigation area and this area changed to sync up with larger management area |
| Wawawai Landing (Wayside) (Pull out at river mile 114.5) | MRM-VM | MRM-LDR | 2.07 | Campsite areas between highway and Lower Granite Lake |
| Blyton Landing (Wayside) (Pull out at river mile 120.5) | MRM-VM | MRM-LDR | 1.34 | Campsite areas between highway and Lower Granite Lake |
| Wawawai Landing (Pull outs downstream of Granite Point) | MRM-VM | MRM-LDR | 4.97 | Campsite areas between highway and Lower Granite Lake |
| Silcott HMU | MRM-VM | MRM-WM | 51.74 | VM is a sub category under Wildlife management and is managed under MRM |
| Steptoe Canyon HMU | MRM-VM | MRM-WM | 59.71 | VM is a sub category under Wildlife management and is managed under MRM |
| Water Tank HMU | MRM-VM | MRM-WM | 22.95 | VM is a sub category under Wildlife management and is managed under MRM |
| | TOTAL | | 725.09 | |
| Changed from MRM-Future or Inactive Recreation Areas | | | | |
| Blyton Landing | MRM-FIR | HDR | 4.20 | Land developed and is now campsite |
| Lower Granite North Shore Tailrace | MRM-FIR | MRM-LDR | 2.74 | Land developed and is now campsite and fishing area |
| Nisqually John Landing | MRM-FIR | HDR | 9.82 | Land developed and is now campsite, picnic, and fishing, area |
| | TOTAL | | 16.76 | |
| Changed From Water Surface | | | | |
| Asotin Creek ESA | Water Surface | ESA | 7.14 | Area will become protected area as part of a mitigation agreement with Washington Department of Ecology |
| Swallows Beach Fill | Water Surface | HDR | 2.94 | Existing area will be turned into wetland due to natural sediment accumulations |
| | TOTAL | | 10.08 | |

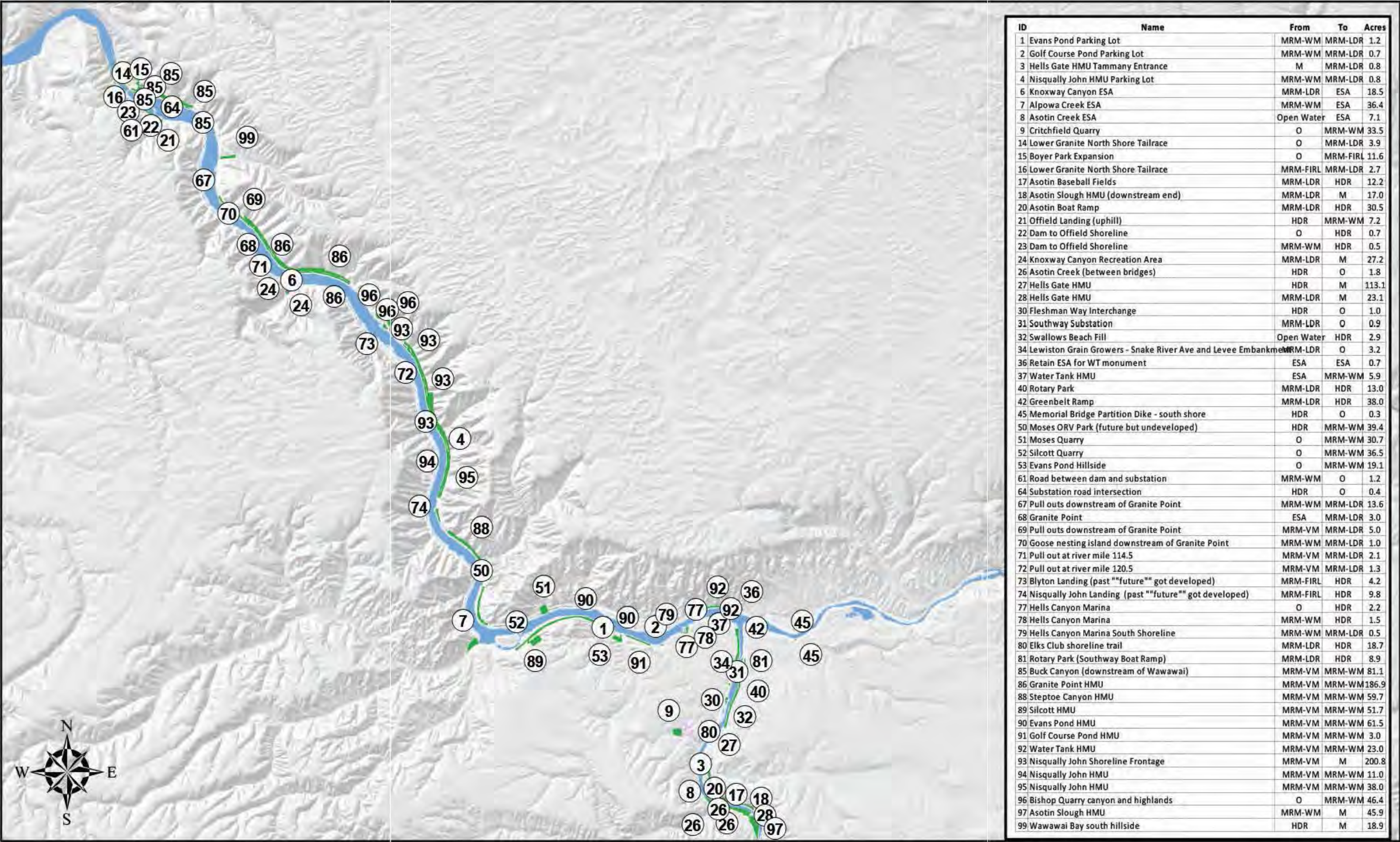
Table E-2. Land Classification Changes Sorted by Updated Land Classification

| Management Areas | Land Classification | | Acres | Reason For Change |
|--|---------------------|-----------------------------|-------|---|
| | FROM (2017) | TO (2018 Master Plan) | | |
| Changed to Project Operations | | | | |
| Asotin Creek (between bridges) | HDR | O | 1.77 | Area is encompassed by road and levee not suitable for Recreation area |
| Fleshman Way Interchange | HDR | O | 1.00 | Area is a bridge abutment. Not suitable for Recreation area |
| Memorial Bridge Partition Dike - south shore | HDR | O | 0.26 | Area is part of levee operations. Not suitable for Recreation area |
| Substation road intersection | HDR | O | 0.37 | Area encompasses road between BPA substation and road |
| Lewiston Grain Growers - Snake River Ave and Levee Embankment | MRM-LDR | O | 3.20 | Road and base of levee |
| Southway Substation | MRM-LDR | O | 0.88 | Operations for AVISTA substation |
| Road between dam and substation | MRM-WM | O | 1.22 | Area at BPA substation and road |
| | | TOTAL | 8.70 | |
| Changed to High Density Recreation | | | | |
| Dam to Offfield Shoreline | O | HDR | 0.71 | Changed to accommodate fishing area along shore |
| Hells Canyon Marina | O | HDR | 2.21 | Area converted to parking lot and boat launch for marina |
| Blyton Landing (past ""future"" got developed) | MRM-FIRA | HDR | 4.20 | Land developed and is now campsites |
| Nisqually John Landing (past ""future"" got developed) | MRM-FIRA | HDR | 9.82 | Land developed, past "future" got developed |
| Asotin Baseball Fields | MRM-LDR | HDR | 12.25 | Irrigated ball parks, highly developed recreation area |
| Asotin Boat Ramp | MRM-LDR | HDR | 30.49 | Vault toilet, boat ramp, heavy recreation usage |
| Elks Club shoreline trail | MRM-LDR | HDR | 18.74 | Trail system between Hells gate and City of Lewiston |
| Greenbelt Ramp | MRM-LDR | HDR | 38.00 | Area part of developed ramp and trail system |
| Rotary Park | MRM-LDR | HDR | 13.04 | Developed park, high public usage |
| Rotary Park (Southway Boat Ramp) | MRM-LDR | HDR | 8.92 | Southway boat ramp, paved, restroom. High public usage |
| Dam to Offfield Shoreline | MRM-WM | HDR | 0.47 | Shoreline used for fishing access, high public usage |
| Hells Canyon Marina | MRM-WM | HDR | 1.47 | Part of Marina, high public usage |
| Swallows Beach Fill | Open Water | HDR | 2.94 | Existing area will be turned into wetland due to natural sediment accumulations |

| Management Areas | Land Classification | | Acres | Reason For Change |
|--|---------------------|-----------------------|--------|--|
| | FROM (2017) | TO (2018 Master Plan) | | |
| | | TOTAL | 143.26 | |
| Changed to Environmentally Sensitive Areas | | | | |
| Retain ESA for WT monument | ESA | ESA | 0.74 | Washington Territory Monument - historical area |
| Knoxway Canyon ESA | MRM-LDR | ESA | 18.46 | Swallows Beach Mitigation Project with Washington Department of Ecology |
| Alpowa Creek ESA | MRM-WM | ESA | 36.37 | Swallows Beach Mitigation Project with Washington Department of Ecology |
| Asotin Creek ESA | Open Water | ESA | 7.14 | Swallows Beach Mitigation Project with Washington Department of Ecology |
| | | TOTAL | 62.71 | |
| Changed to Mitigation | | | | |
| Hells Gate HMU | HDR | M | 113.06 | Hells Gate bench area is part of the wildlife Mitigation lands for the Lower Snake River Fish and Wildlife Compensation Plan |
| Wawawai Bay south hillside | HDR | M | 18.89 | Land too steep to develop for recreation; more suitable for WM |
| Asotin Slough HMU (downstream end) | MRM-LDR | M | 17.03 | Part of Lower Snake River Fish and Wildlife Compensation Plan wildlife mitigation |
| Hells Gate HMU | MRM-LDR | M | 23.14 | Part of Lower Snake River Fish and Wildlife Compensation Plan wildlife mitigation |
| Knoxway Canyon Recreation Area | MRM-LDR | M | 27.21 | Recreation area never developed connecting property already mitigation area |
| Nisqually John Shoreline Frontage | MRM-VM | M | 200.84 | Nisqually John is a mitigation area and this area changed to sync up with larger management area |
| Asotin Slough HMU | MRM-WM | M | 45.93 | Part of Lower Snake River Fish and Wildlife Compensation Plan wildlife mitigation |
| | | TOTAL | 446.1 | |
| Changed to MRM-Low Density Recreation | | | | |
| Lower Granite North Shore Tailrace | O | MRM-LDR | 3.94 | Converted to camping and fishing multipurpose area |
| Granite Point | ESA | MRM-LDR | 2.97 | High visitation warrants LDR designation |
| Hells Gate HMU Tammany Entrance | M | MRM-LDR | 0.83 | Parking lot and access point to Hells Gate Park |
| Lower Granite North Shore Tailrace | MRM-FIRA | MRM-LDR | 2.74 | Land developed and is now campsite and fishing area |
| Wawawai Landing (Wayside) (Pull out at river mile 114.5) | MRM-VM | MRM-LDR | 2.07 | Campsite areas between highway and Lower Granite Lake |
| Blyton Landing (Wayside) (Pull out at river mile 120.5) | MRM-VM | MRM-LDR | 1.34 | Campsite areas between highway and Lower Granite Lake |
| Wawawai Landing (Pull outs downstream of Granite Point) | MRM-VM | MRM-LDR | 4.97 | Campsite areas between highway and Lower Granite Lake |

| Management Areas | Land Classification | | Acres | Reason For Change |
|---|---------------------|-----------------------------|--------|---|
| | FROM (2017) | TO (2018 Master Plan) | | |
| Evans Pond Parking Lot | MRM-WM | MRM-LDR | 1.16 | Public access to fishing. Vault toilet, parking lot, high usage |
| Golf Course Pond Parking Lot | MRM-WM | MRM-LDR | 0.67 | Public access to fishing. Vault toilet, parking lot, high usage |
| Goose nesting island downstream of Granite Point | MRM-WM | MRM-LDR | 0.97 | Area adjacent to public picnic and camping site |
| Hells Canyon Marina South Shoreline | MRM-WM | MRM-LDR | 0.54 | Picnic and fishing access on shoreline |
| Nisqually John HMU Parking Lot | MRM-WM | MRM-LDR | 0.81 | Parking lot and access point to HMU |
| Wawawai Landing (Pull outs downstream of Granite Point) | MRM-WM | MRM-LDR | 13.55 | Campsite areas between highway and Lower Granite Lake |
| | | TOTAL | 36.56 | |
| Changed to MRM–Wildlife Management | | | | |
| Bishop Quarry canyon and highlands | O | MRM-WM | 46.36 | Resized Operations classification to match quarry area with residual going to WM |
| Critchfield Quarry | O | MRM-WM | 33.47 | Quarry not utilized and land suitable for WM |
| Evans Pond Hillside | O | MRM-WM | 19.05 | Originally designated Ops for highway construction; area now suitable for wildlife |
| Moses Quarry | O | MRM-WM | 30.72 | Area no longer used as quarry, suitable for WM |
| Silcott Quarry | O | MRM-WM | 36.47 | Area no longer used as quarry, suitable for WM |
| Moses ORV Park (future but undeveloped) | HDR | MRM-WM | 39.37 | ORV area never developed due to steep terrain, better suited to WM |
| Offield Landing (uphill) | HDR | MRM-WM | 7.17 | Land too steep to develop for recreation; more suitable for WM |
| Water Tank HMU | ESA | MRM-WM | 5.88 | Excess area originally part of Washington Territory monument but entire zone was not required to protect monument |
| Buck Canyon (downstream of Wawawai) | MRM-VM | MRM-WM | 81.07 | VM is a sub category under Wildlife management and is managed under MRM |
| Evans Pond HMU | MRM-VM | MRM-WM | 61.46 | VM is a sub category under Wildlife management and is managed under MRM |
| Golf Course Pond HMU | MRM-VM | MRM-WM | 2.98 | VM is a sub category under Wildlife management and is managed under MRM |
| Granite Point HMU | MRM-VM | MRM-WM | 186.86 | VM is a sub category under Wildlife management and is managed under MRM |
| Nisqually John HMU | MRM-VM | MRM-WM | 11.05 | VM is a sub category under Wildlife management and is managed under MRM |
| Nisqually John HMU | MRM-VM | MRM-WM | 38.05 | VM is a sub category under Wildlife management and is managed under MRM |

| Management Areas | Land Classification | | Acres | Reason For Change |
|---|---------------------|-----------------------------|--------|---|
| | FROM (2017) | TO (2018 Master Plan) | | |
| Silcott HMU | MRM-VM | MRM-WM | 51.74 | VM is a sub category under Wildlife management and is managed under MRM |
| Step toe Canyon HMU | MRM-VM | MRM-WM | 59.71 | VM is a sub category under Wildlife management and is managed under MRM |
| Water Tank HMU | MRM-VM | MRM-WM | 22.95 | VM is a sub category under Wildlife management and is managed under MRM |
| | | TOTAL | 734.36 | |
| Changed to MRM—Future or Inactive Recreation Areas | | | | |
| Boyer Park Expansion | O | MRM-FIR | 11.59 | Proposed future park expansion area |
| | | TOTAL | 11.59 | |





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APPENDIX F. FINDING OF NO SIGNIFICANT IMPACT (FONSI) WITH PUBLIC COMMENT RESPONSES

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**FINDING OF NO SIGNIFICANT IMPACT
LOWER GRANITE LOCK AND DAM MASTER PLAN
CLARKSTON, WASHINGTON
JULY 2018**

1. INTRODUCTION/PROPOSED ACTION

The Walla Walla District of the US Army Corps of Engineers (Corps) proposes to adopt a new Lower Granite Lock and Dam (Project) Master Plan (MP) for the comprehensive management and development of natural, recreational and cultural resources. The updated MP would promote the efficient and cost effective management, development, and use of project lands and would be a vital tool for responsible stewardship and sustainability of Project resources for the benefit of present and future generations.

Due to a combination of age, changes in techniques and methods required by Corps policy, changes for endangered species management, as well as substantial increases in public use of the Project, the 1974 MP no longer fulfills the intended purpose. An all-inclusive approach is needed to respond to public requirements while meeting all other Project goals. The proposed MP would be a dynamic document that deals in management concepts, not in the specific details of design or administration. It would provide for balanced resource management under special programs, such as environmentally sensitive areas, cultural resources protection, and protection of endangered species and critical habitat. The proposed MP would respond to increased and changing use, visitor desires, and would bring the Project into compliance with current policy.

2. PURPOSE AND NEED

The purpose of the proposed action is to provide a comprehensive description of the Project, a discussion of factors influencing resource management and development, identification and discussion of special issues, a synopsis of public involvement and input to the planning process, and description of past, present, and proposed development. It would also incorporate current Corps land use classification standards, include contemporary requirements mandated by federal environmental laws, and better reflect the Corps Environmental Operating Principles, natural resource management mission and environmental stewardship and ecosystem management principles.

Updating the MP is needed because the existing MP is more than 40 years old and provides an inadequate base with which to evaluate contemporary (current and future) land and resources management (e.g. increasing demand for recreational opportunities). The updated MP would comply with new policy found in Corps' EP 1130-2-550, which requires the Project to focus on particular qualities, characteristics, and potentials of the Project and provides consistency and compatibility with national objectives and other state and regional goals and programs. The approval and adoption of the updated MP would assure the requirements of Corps' policies are met

and comments from the public, local, state, federal agencies, and tribes are addressed.

3. ALTERNATIVES CONSIDERED

The alternatives for the Environmental Assessment (EA) were developed by evaluating combinations of possible activities developed during Corps scoping meetings, consideration of actions identified during the public scoping period, local conditions, and applicable environmental laws and regulations. The activities and actions were combined into alternatives, as required under the National Environmental Policy Act (NEPA), based on logistical efficiencies, as well as meeting the Corps mission for the Project.

The four alternatives developed in this EA are:

- **Alternative 1 (No Action Alternative):** Current management based on strategy and guidelines in the 1974 MP with updates in amendments and legal mitigation requirements since 1974.
- **Alternative 2 (Balanced Alternative-Proposed MP):** MP update based on new Corps' policy, balancing designed visitor use with environmental and cultural resource sustainability.
- **Alternative 3 (Wildlife Alternative):** MP update focused on preservation and enhancement of wildlife resources and habitat. Corps Project personnel identified potential changes in land classifications that would benefit wildlife.
- **Alternative 4 (Recreation Alternative):** MP update focused on expanding access and visitor facility development. Project personnel identified potential changes in land classifications that would benefit recreational opportunities.

Alternative 1, the No Action Alternative prescribed by the Council of Environmental Quality under NEPA to serve as the baseline against which all other alternatives are analyzed, was carried forward for detailed analysis. Alternatives 3 and 4 were rejected from detailed analysis as they failed to meet the screening criteria related to the Project Purpose and Need and other operational needs. Alternative 2, the Balanced Alternative, best meets the Purpose and Need and the screening criteria and was carried forward as the Preferred Alternative for detailed analysis.

4. PREFERRED ALTERNATIVE

The Proposed MP, Alternative 2, would replace the 1974 MP. The intent of the Proposed MP is to develop a guide for the sustainable use of resources at the Project. To fully authorize changes in facilities, use and resource management, and to accommodate regional changes and requirements such as project operations to meet Endangered Species Act (ESA) requirements, a planning document is required that meets Corps' policy. The EP 1130-2-550, (USACE 2013) provides the following MP

guidance. “A current, approved MP is necessary before any new development, construction, consolidation, or land use change can be pursued. These activities will not be included in budget submissions unless they are included in an approved MP”. The primary objective of this Proposed MP is to publish a clear, concise, and strategic land use document that will guide the comprehensive management and development of all Project recreational, natural, and cultural resources.

Alternative 2 would help focus on four primary components that were not included in the 1974 document, or that require expanded analysis, including:

- Regional investigation of recreational and ecosystem needs
- Project resource capabilities and suitability
- Expressed public interests that are compatible with authorized purposes
- NEPA compliance, including a Cumulative Effects Assessment

The Proposed MP update would provide a current comprehensive description of the Project, a discussion of factors influencing resource management and development, identification and discussion of special issues, a synopsis of public involvement and input to the planning process, and description of past, present, and proposed future development. The Proposed MP would incorporate current Corps land use classification standards, include contemporary requirements mandated by federal environmental laws, and better reflect the Corps Environmental Operating Principles, natural resource management mission and environmental stewardship and ecosystem management principles.

The Proposed MP would include a description of Resource Objectives (ROs) which were not part of the 1974 MP. ROs are clearly written statements that respond to identified issues and specify measurable and attainable activities for resource development and/or management of the lands and waters under jurisdiction of the Walla Walla District at the Project. The objectives would be consistent with authorized project purposes, Federal laws and directives, and they take into consideration regional needs, resource capabilities, State Comprehensive Outdoor Recreation Plans, cultural and natural resources significant to regional Tribes, and public input. Recreational and natural resources carrying capacities are also accounted for during development of the objectives found in the proposed MP.

5. ENVIRONMENTAL EFFECTS

Alternative 2 and the No Action Alternative were analyzed for potential effects to the following resources: Aesthetics, Recreation, Socioeconomics, Aquatic Resources, Wildlife, Vegetation, Water Quality, Threatened and Endangered Species, Cultural Resources, Environmental Justice, and Climate Change.

The Corps considered the effects of the proposed action along with other past, present, and reasonably foreseeable future actions in the Project area. The Corps analyzed the cumulative effects on Recreation and Wildlife resources because they were determined to be notable for their importance to the area and their potential for cumulative impacts.

Environmental analysis and effects of Alternative 2 and the No Action Alternative are detailed in Section 3 of the EA. The analysis concluded there would be no detrimental impacts to the resources analyzed from Alternative 2, and overall long-term effects on all analyzed resources would be insignificant or beneficial. The potential effects of the proposed action, when combined with the effects of past, present and reasonably foreseeable future actions, is not expected to result in significant effects to the resources identified above.

5. PUBLIC COMMENT/INVOLVEMENT

A 30 day public scoping process for the Master Plan Revision was initiated on March, 22 2017 and was extended another 30 days until May 22, 2017. Letters were sent to interested public, organizations, stakeholders, federal and state congressional offices, agencies, and tribes offering the opportunity to comment on the scoping process for the Master Plan update.

The Corps conducted public scoping meetings in Clarkston, Washington on March 22, 2017 and in Pullman, Washington on March 23, 2017. The meetings were attended by approximately 80 individuals. The Corps received about 70 suggestions and comments related to management issues and recreation at the Project. The general concepts presented included providing access to the Project and surrounding areas, to enhance the wildlife habitat and recreational opportunities, and consideration of local economic development opportunities. Comments compiled from attendees at the public scoping meeting and other sources were used to update the MP.

The Draft MP, Finding of No Significant Impact (FONSI), and EA were made available to individuals, businesses, organizations and agencies for a 21-day review and comment period from June 5 to June 26, 2018, which was extended an additional 14 days until July 10, 2018. The Corps received 18 comment documents from interested members of the public. Corps responses to comments are attached to this FONSI.

6. COMPLIANCE WITH OTHER LAWS AND REGULATIONS

See Section 4.0 of the EA for a discussion of compliance with other laws and regulations. The proposed action complies with other federal laws and applicable regulations.

The Corps sent copies of the Biological Evaluation (BE) to the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) on March 16, 2018 for their review and concurrence with ESA. The Corps provided an amended BE to both agencies on June 13, 2018, based on input received. The Corps expects to receive written concurrence from NMFS and USFWS in the near future, which will be added to the MP Administrative Record.

The Corps determination of not likely to adversely affect listed species or designated critical habitat was based solely on the premise that changes in land use classifications that provide restrictions on future development of those lands would be purely

beneficial. For example, the proposed reclassification of portions of Alpowa, Asotin Creek, and Knoxway Canyon Habitat Management Units from land classification units currently allowing various forms of development, to Environmentally Sensitive Area land classification units, which are managed to protect scientific, ecological, cultural, or aesthetic features, is intended to provide additional, long-term protection benefits to these areas. This reclassification would also help protect these areas as required mitigation for the Clean Water Act, Section 401 Certification granted by the State of Washington Department of Ecology associated with the Swallows Beach Restoration Project.

Master Plans are not intended to authorize or specify site-specific management actions. As stated in Engineer Pamphlet 1130-2-550, Section 3-2, "The MP deals in concepts, not in details of design or administration. Detailed management and administration functions are addressed in the Operational Management Plan (OMP), which implements the concepts of the MP into operational actions." Therefore, adoption of the MP under a "no effect" finding would also be supportable.

Adoption of the Proposed MP would be in compliance with the ESA. Implementation of future specific actions under an OMP or otherwise would require separate assessment of effects to species and critical habitat in compliance with ESA.

7. CONCLUSION/FINDING

Having reviewed the Lower Granite Project Master Plan EA, I find the document provides sufficient discussions on the purpose and need for the proposed action, alternatives, the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted. I have taken into consideration the technical aspects of the project, best scientific information available and public comments received. These documents provide sufficient evidence and analysis to meet the District's requirements pursuant to the National Environmental Policy Act.

Based on this information, I find that implementation of the proposed action would not result in significant impacts on the quality of the human environment and that an environmental impact statement is not required. The District will implement Alternative 2 (Balanced Alternative-Proposed MP) at the earliest opportunity, subject to availability of funding and competing Project priorities.



Damon A. Delarosa
Lieutenant Colonel, Corps of Engineers
District Commander



Date

Attachment

Lower Granite Lock and Dam Master Plan Comments Response Document 17 July 2018

The U.S. Army Corps of Engineers, Walla Walla District (Corps) made the Draft Finding of No Significant Impact (FONSI) and the Environmental Assessment (EA) for the *Lower Granite Lock and Dam Master Plan, Clarkston, Washington* (MP) available for public review and comment on June 5, 2018. The Corps provided a period for the public, and other interested parties, to review the documents and provide comment by July 10, 2018.

The Corps received 18 individual comment documents (e.g. letter, email) from interested members of the public, Port of Clarkston, Environmental Protection Agency, Nez Perce Tribe, Washington Cattleman's Association, Port of Whitman, Whitman County, Asotin County, and adjacent landowners representing agricultural interests (collectively). The Corps carefully reviewed and considered each substantive comment submitted. In preparing this document, the Corps divided the substantive comments into the following categories and provided responses.

1. General Topics
2. Land Classification
3. Cultural/Tribal Resources
4. Grazing/Ranching
5. Invasive Plants
6. Fire Management/Hazards
7. General Environmental impacts
8. Recreation
9. Real Estate/Land Conveyance

| Comments Received | Corps Response |
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| 1) General | |
| a) Commenter noticed that a document was not included on one of the web links. | A Corps employee contacted the commenter directly and sent them the requested document. The web link was updated to include the document. |
| b) Commenter suggests adding the "Port of Clarkston" south of Granite Lake Park in Plate 12 of Appendix D. | The map was edited to identify the Port of Clarkston in Plate 12. |
| c) The commenter states the map scales appear to be incorrect. | Corps has determined that the map scales have been corrected. |
| d) The commenter states that a better working relationship with adjacent landowners up and down the river corridor would benefit not only the ranchers and the Corps of Engineers, but also the general public for improved wildlife habitat. | The Corps tries maintaining good working relationships with adjacent landowners and is open to coordinating weed treatment efforts to maximize benefits. The Corps may be open to allowing adjacent landowners to treat weeds, but they would need to meet application requirements. |
| e) The commenter is pleased to note that the new MP development process considered public input for identifying the planning criteria, significant impacts and issues, and potential alternative actions and the Corps addressed these elements in the draft EA. | Comment noted. |
| f) The commenter agrees that future site-specific projects and plans tied to the new MP should be subject to separate NEPA analysis, public review and comment, which will ensure that individual project impacts can be fully analyzed and appropriate mitigation measures determined. | The Master Plan is a broad scale planning document. More detailed environmental reviews may be conducted in the future associated with the Operations Management Plan, which is an annual plan for projects proposed for implementation each year, and for site-specific proposals. |
| g) The commenter states the EA does not clearly discuss the outcomes of previous management practices under the 1974 MP. We recommend the final EA summarize the results of any monitoring efforts to measure the effectiveness of previous practices under the 1974 MP. We also recommend the final EA document the adaptive management changes made since 1974 and compare those changes with the measures planned for this revised MP. We further recommend the description of the affected environment in the final EA incorporate these adaptive management changes. | As stated in the response to comment 1)f), the Master Plan is a broad scale planning document providing general direction and oversight to Corps natural resource management actions over the next 20+ years. Monitoring has been conducted for actions related to site-specific projects/activities since the 1974 Master Plan, but comprehensive monitoring for Master Plan compliance has not been a mission requirement for the Corps. Adaptive management actions are implemented as new technology and procedures are developed and their use is supported by the Corps through budgets and regulations. The Operations Management Plan and site-specific project proposals will utilize adaptive management strategies wherever possible. |
| h) The commenter states that information in the EA indicates that the land classification in the 1974 MP included 4705.6 acres and this area has since doubled to 8626.2 acres in 2018. We recommend the EA discuss the land acquisition, explain any ownership changes that occurred, preferably including a map or other visual aid to show the current planning area boundaries, and discuss management implications for the proposed MP. | The Master Plan describes the acquisition of additional Corps lands from 1974 to 2017 in detail in Section 4.2.1, including a graphic (Figure 4-1) and several tables (4-1, 4-2, and 4-3). This information was also presented in Section 2.4.2 of the EA (including Table 2-3), in a briefer format. The detailed information was not repeated in the EA to minimize document size and conserve resources. The focus of the EA was to describe potential environmental impacts of the proposed land classification unit changes, not repeat background information already in the Master Plan. Readers and users are encouraged to utilize the MP and EA as companion documents supporting each other. |

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| <p>i) The commenter states the Army Corps of Engineers should realistically address access issues for itself, adjacent landowners and the public. The draft plan should address how the Corps intends to mitigate terrain impacts and management as a whole to the area, including actual management records to date, historical adjacent landowner access and agreements (verbal and written), as well as habitat and salmonid value particularly in the steep and rugged areas. Section 2.5 is not an in-depth discussion as to access as it does not give the reader an accurate understanding of historical and to-date access issues in this region.</p> | <p>This section addresses general public access to the project lands (Recreation and HMUs). Private and non-recreational use is outside the scope of the Master Plan. Adjacent land ownership records, both verbal and written, and salmon habitat value are outside the scope of this Master Plan. The Corps does not have any information or records to verify any verbal access agreements.</p> |
| <p>j) The commenter states that because of the steep terrain, there are access issues which are not being addressed – access for the Army Corps of Engineers, adjacent landowners, and public access. The plan should address potential MOUs and/or studies to determine how the terrain impacts management as a whole to the area, taking into consideration actual management that has occurred, access, and adjacent landowners, as well as habitat value in the steep and rugged areas. It should be noted that this plan in its current form does not address access issues to the extent they should and need to be addressed.</p> | <p>See comment response 1)i) above.</p> |
| <p>k) The commenter claims, “Passive” management is no management. Section, 2.6.1, talks about prioritizing upland management in a mere 30 acres. By limiting active management to a small, specific area owned by the Corps, the Corps creates an illegal burden on adjacent property owners allowing weeds to spread to adjacent lands causing those property owners to absorb damages and the extra cost of control.</p> | <p>This comment is misleading and out of context to Section 2.6.1. While the Corps does practice "passive" management, this section of the document is clear on the Corps actively managing HMUs. The Corps issues a base multiple award task order contract (MATOC) every 5 years to a firm who maintains noxious weeds, food plots, tree and shrub planting, brush piles for quail and small game, and native grass fields. While Project lands total over 8,000 acres, funding limits the amount of intense management across all acreages. HMUs such as Nisqually John (3,500 acres) are rugged, rocky, and dry. One of the few active management approaches to noxious weeds in this HMU is aerial herbicide application. Noxious weed control actions are prioritized by on-the-ground surveys across all HMUs by District wildlife biologists each year, and control efforts are targeted to the most problematic areas. The statement that the Corps "...talks about prioritizing upland management in a mere 30 acres." is inaccurate as the sentence in the Master Plan is clear that the 30 acres in question are specific to planting, and immediately follows the sentence about our grassland management focus.</p> |
| <p>l) The commenter reports that the section, 2.6.1, talks about prioritizing upland management in a mere 30 acres. Management of lands is not a "passive" issue. "Passive" management, especially of noxious weeds allows these weeds to become not only issues for the Corps but adjacent landowners --- the neighbors. The management of noxious weeds should be a main budget issue. Poor weed management practices allows these weeds to spread to adjacent lands and costs the private landowners and damages crops and adjacent lands.</p> | <p>See comment response 1)k) above.</p> |

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| <p>m) The commenter states the draft plan does not give details regarding the 20-year management contract in place. The contract should be included in the document for access by the public. In addition, an audit should be performed and presented to the public each year identifying what and how the contract has been fulfilled, a cost analysis, and if the work done was successful</p> | <p>Section 2.6.1 has been edited to include the broad objectives the habitat management contract, as well as their presentation in Section 2.6.2. The contract is public information, as are the hundreds of quality assurance reports submitted year-round by the contractor to the Corps, and those filed by the Corps in surveillance of contractor performance.</p> |
| <p>n) The commenter asks what fencing, spraying, planting, actual management has occurred? This section (2.6.2) identifies a contract that has been in place for 20 years, but does not identify what is required in that contract; what has actually been done; if that work has been successful; and the cost. This contract needs to be examined and identified so that an audit can take place to make sure the contract is in compliance and public funds are being spent where allocated.</p> | <p>See comment response 1)m).</p> |
| <p>o) The commenter states the draft plan has no discussion of coordination with adjacent landowners. Adjacent landowners are the most impacted by the Army Corps of Engineers actions.</p> | <p>Adjacent landowners have the opportunity to participate in the scoping and public comment periods that are part of the Master Plan process. Chapter 7 discusses the scoping meetings and letter that were sent out to stakeholders. -23/24 March 2017 - Public Scoping meetings on LLA MP held in Clarkston and Pullman. Included press releases and ads in local newspapers.</p> <p>- 17 January 2018 - Briefed the Confluence Waterfront Coalition about LLA MP status</p> <p>- 29 May 2018 - Letters sent to Tribal leadership about open comment period on draft LLA MP</p> <p>- 4 June 2018 - Press release about public comment period on draft LLA MP including website link with draft LLA MP and supporting info</p> <p>- 5 June 2018 - Letters sent to congressional about open comment period</p> <p>- 5-26 June 2018 - Open comment period</p> <p>- 13 June 2018 - Briefed the Confluence Waterfront Coalition about open comment period for draft LLA MP</p> <p>- 15 June 2018 - Lewiston Tribune article about Swallows Beach and draft LLA MP comment period (https://lmtribune.com/outdoors/new-life-for-an-old-beach/article_589d4aad-c2af-5bff-ad38-00f6d67cad0c.html)</p> <p>- 26 June 2018- Comment period extended to July 10th, 2018</p> |
| <p>p) The commenter states that coordination is deficient in a discussion of coordination with adjacent landowners. Adjacent landowners are most impacted. The stakeholders are adjacent landowners who should be brought to the table and included in the discussions.</p> | <p>See comment response 1)o).</p> |

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| <p>q) The commenter states the draft plan should include a more aggressive outreach plan which should include ALL adjacent landowners and they should be included in the “stakeholder” section. Multiple attempts to outreach to this group should be included in the plan as well as more scoping meetings. Adjacent landowners are the group most impacted by the Corps land, it’s uses and management and they should be included in all aspects of this creation and implementation of any Master Plan.</p> | <p>See comment response 1)o).</p> |
| <p>r) The commenter states scoping needs to include ALL adjacent landowners. All adjacent landowners should receive letters and direct communication regarding these plans and all management decisions.</p> | <p>See comment response 1)o).</p> |
| <p>s) The commenter states the draft plan should include answers to the following questions: How is land allocated under this section? What is the criteria for this property to be allocated under mitigation? Why is this number of acres increasing from 2017 to 2018? How has the Army Corps of Engineers purpose changed since 1974 to allow for this increase in mitigation acreage? How has the Army Corps of Engineers budget increased to manage these acres? Sheep Gulch, Water Tank, and Wawawai HMUs- How many people use these HMUs? How much money has the Army Corps of Engineers spent to build fence and maintain it?</p> | <p>Mitigation has been a formal land classification used in the 1970s and remains valid a land classification in the revised ER/EP 1130-2-550. The original Lower Granite Master Plan published in 1974 did not have any mitigation lands allocated. This is the first formal update of the Master Plan and all the mitigation lands added have come as the result of the Lower Snake River Fish and Wildlife Compensation Plan, which was initiated in 1976. No supplements were done to the Master Plan between 1974 and 2018 to accurately reflect the mitigation lands. Mitigation lands are defined in Chapter 4 of the Master Plan. All mitigation lands were designated to offset the damages to fish and wildlife due to the construction of the four Lower Snake River dams. Land changes from 2017 to 2018 occurred as a result of coordination between Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, and US Fish and Wildlife Services to meet habitat requirements for terrestrial species in Idaho and Washington. The total number of acres have not changed. Only the land classifications were changed and are listed by site and purpose in the Appendix of the Master Plan.</p> |
| <p>t) The commenter states this plan, in its current form, needs to be redrafted prior to the final version, with the considerations described herein, taken into consideration and addressed, with another comment period for these revisions to be reviewed.</p> | <p>The Corps does not believe that the Master Plan or Environmental Assessment warrant another version.</p> |
| <p>u) The recommendations of section 8 needs to be clear that all actions and management need to be done in a collaborative effort with notice and input from adjacent landowners so that the Snake River Corridor can be managed in a holistic manner. This plan, in its current form, needs to redrafted prior to the final version, with the considerations described herein, taken into consideration and addressed, with another comment period for these revisions to be reviewed.</p> | <p>See comment response 1)t).</p> |

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| <p>v) The commenter states the corps should be paying Payment In Lieu Of Taxes. They do not currently do so.</p> | <p>Payments in Lieu of Taxes" (PILT) are Federal payments to local governments that help offset losses in property taxes due to non-taxable Federal lands within their boundaries. The original law is Public Law 94-565, dated October 20, 1976. This law was rewritten and amended by Public Law 97-258 on September 13, 1982 and codified at Chapter 69, Title 31 of the United States Code. The law recognizes that the inability of local governments to collect property taxes on Federally-owned lands can create a financial impact. Counties with Corps managed lands do receive PILT funds. See website https://www.doi.gov/pilt for details.</p> |
| <p>w) The commenter states the Corps has taken a thoughtful approach to land classifications in order to make assignments uniform and consistent. Perhaps one of our greatest concerns is that uniformity doesn't work that well when the areas assigned classifications are both urban and rural. The use of land within the City limits of Asotin for mitigation is not sustainable for a growing community. In addition, there doesn't appear to be much distinction between Hells Gate State Park and Chief Looking Glass Park in Asotin, but one is very much an urban area and the other has more of a rural flavor.</p> | <p>The Corps followed ER/EP 1130-2-550 which only allows for certain land use classifications. The Corps is limited to the use of land classifications in ER/EP 1130-2-550 which do not provide a distinction for urban or rural areas.</p> |
| <p>2) Land Classification</p> | |
| <p>a) Commenter questions the proposed change of "Lewiston Grain Growers - Snake Rive Ave and Levee Embankment" Management Area and the "Southway Substation" Management Area from MRM-LDR to O. These areas are both used heavily by the public for recreational uses? What, specifically, are the justifications for the proposed changes of these two area designations? If enacted, how will they impact the current recreational uses of the areas? Will they become prohibited?</p> | <p>The areas identified include Project features such as levees and are appropriately identified as operations lands. Current recreational use will not be restricted.</p> |
| <p>b) The commenter reports that there is a remnant of the natural Snake River Canyon bunch grass plant community has been retained and currently flourishes on the island's north slope at Chief Timothy Park. The area is about 5 acres, comprising less than 2% of the total island. The commenter hopes that this part of the island's environmental resource status will be acknowledged and properly documented so that it can be protected from habitat destruction or degradation.</p> | <p>The island is currently operated through a real estate out grant to a private party which operates portions of the area for recreational purposes. The real estate out grant agreement currently runs through 2028. The Corps has no knowledge of the operator planning any development in the area the commenter has identified with the remnant bunch grass plant community. If development is proposed by the holder of real estate out grant, they would present their proposal to the Corps for approval, at which time the Corps would consider the commenter's information.</p> |
| <p>c) The commenter states this section (4.2) should also include commercial property or property that can be leased to allow for commercial purpose such as ag or other commercial purpose such as the port districts.</p> | <p>ER/EP 1130-2-550 (Chapter 3), does not include a "commercial purpose" land classification.</p> |

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| d) The commenter states the draft plan should include answers to the following questions: How is land allocated under this section (4.2.2.3)? What is the criteria for this property to be allocated under mitigation? Why is the number of acres increasing from 2017 to 2018? How had the Army Corps of Engineers purpose changed since 1974 to allow for this increase in mitigation acreage? How has the Army Corps of Engineers budget increased to manage these acres? Sheep Gulch, Water Tank, and Wawawai HMUs-How many people use these HMUs? How much money has the Army Corps of Engineers spent to build fence and maintain it? | Mitigation lands are designated based on the criteria in ER/EP 1130-2-550. In 1974, mitigation was not an authorized land use classification. Acreage has increased because certain lands have been determined to meet the new "mitigation" lands criteria and some lands were purchased specifically as mitigation lands. Compliance with the Fish and Wildlife Coordination Act (FWCA) resulted in development of the Lower Snake River Fish and Wildlife Compensation Plan (LSRFWCP) in 1976. The LSRFWCP designated available lands as wildlife habitat for FWCA mitigation and some additional lands were purchased under the LSRFWCP. The Master Plan is now being updated to reflect this change. Budgets are not addressed in Master Plans. HMUs are not funded based on visitation and that is not tracked at these locations. Fence costs are not addressed in the Master Plan. |
| e) The commenter asks how is land allocated under this section (4.2.2.3)? What is the criteria for this property to be allocated under mitigation? Why is this number of acres increasing from 2017 to 2018? How has the Army Corps of Engineers purpose changed since 1974 to allow for this increase in mitigation acreage? How has the Army Corps of Engineers budget increased to manage these acres? Sheep Gulch, Water Tank, and Wawawai HMUs- How many people use these HMUs? How much money has the Army Corps of Engineers spent to build fence and maintain it? | See comment response 2)d). |
| 3) Cultural/Tribal Resources | |
| a) The commenter states the Master Plan needs to mention the Nez Perce and their historic connection to the land in the document. | The Corps has added additional information to the Master Plan in Section 2.7 discussing the Nez Perce and Palus people, their ancestral territory, and their historic connection to the land. |
| b) The commenter states the document mentions Yakama Nation TCPs, but not Nez Perce TCPs. | The document mentions Traditional Cultural Properties for the Nez Perce and two other Tribes on page 2-21. |
| c) The commenter states they were generally ok with mentioning that the Nez Perce were engaged, but do not agree with any value placed on that engagement "VERY engaged", "EXTENSIVE consultation". | The Corps agrees with this comment. |
| d) The commenter requests that the Nez Perce reservation boundaries be depicted on the maps. | The Nez Perce reservation boundary has been added to Plate 19. |
| e) The commenter states that the MP mentions the historic townsite at this location (believed to be Silcott/Alpowa), but fail to mention that it was also a Nez Perce village. | We generally do not mention the location of precontact villages, but will add one since it was requested in this instance. Page 5-9, Wawawai County Park Section, changed text to "It was once the site of a Nez Perce village and later, a small town along the river." |
| f) The commenter states the MP talks about the value that Granite Point has to the college students at WSU, but fails to mention that it is an identified TCP for the Nez Perce Tribe. | As per the FCRPS Systemwide Programmatic Agreement (BPA et al. 2009) and The National Historic Preservation Act (54 U.S.C. 307103), the Corps withholds sensitive cultural resources information from public disclosure. There are numerous historic properties on Corps land, including archaeological sites, traditional cultural properties, sacred sites, that are of ongoing importance to the Nez Perce Tribe. |

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| <p>g) The commenters have a general concern that the way the plan is written provides very little recourse to address issues such as closures for damage to sacred sites</p> | <p>Resolution of unauthorized actions, including abuse of sensitive areas, or vandalism to National Register of Historic Places listed or eligible resources, is outside of the scope of the Master Planning process. The Corps has various methods to approach vandalism, including area closure, through Title 36 citations, or civil or criminal actions. In general, unauthorized uses are treated on a case-by-case basis, as each situation is different. If there is a need to close areas for operational requirements or other purposes, information signs can be posted to notify visitors of derivations from the primary or secondary uses of the lands (Master Plan Section 4.2.2). A more descriptive plan for managing Lower Granite Project Lands will be refined in the Lower Granite Operational Management Plan (OMP), which is updated annually.</p> |
| <p>h) The commenter states the Tribe is concerned, however, that the Corps did not fully consult and coordinate with the Tribe about the MP. Although the Corps states that "[c]oordination on the Master Plan update with the Tribes continued throughout the process" (MP 7-2), the Tribe is only aware of one letter inviting it to public meetings; the Tribe did not consider the letter to constitute government-to-government consultation.</p> | <p>The Corps sent a letter to the Tribal Chairs for the Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Colville Reservation, and Confederated Tribes and Bands of the Yakama Nation dated 6 March 2017. That letter invited the Tribes to the public scoping meetings, and in a separate sentence offered government to government consultation and identified a Corps point of contact. The Corps sent a second letter to Tribal Chairs for the Master Plan and EA review, dated 29 May 2018, also with a separate sentence offering government to government consultation and identifying a point of contact. The Corps did not receive any requests from the Tribes for separate Tribal meetings or government to government consultation.</p> |
| <p>i) The commenter states the Tribe is concerned that it and the Environmental Assessment (EA) do not adequately acknowledge the Tribe or its ancestral territory. The MP and EA refer to "affiliated tribes" and "appropriate tribes" without identifying the specific tribes. The entire area covered by the MP lies within the ceded territory of the Nez Perce Tribe. Therefore, only the Nez Perce Treaties of 1855 and 1863 are relevant to the MP and EA. Moreover, while the Tribe appreciates the acknowledgement of Nez Perce Tribal ownership of the bed and banks of the Clearwater River within the Nez Perce reservation (MP 2.10), it is unsettling that Section 2-1 of the MP and Section 4 of the EA discusses provisions of the treaties negotiated with the Nez Perce Tribe, Confederated Tribes and Bands of the Yakama Nation, as if the provisions in these treaties are identical. The Corps's language also erroneously suggests that the United States has upheld all of the provisions in these treaties. The Tribe would like to emphasize the importance of looking at the specific language, in the relevant treaty, when determining whether the plan or project is adequately protective of that treaty. A general discussion, conflating several treaties and several tribes, is not sufficient.</p> | <p>The Corps has added additional information to the MP in Chapter 2.7 discussing the Nez Perce and Palus people, ancestral territory, and specific Tribes. The Nez Perce Treaties of 1855 and 1863 were mentioned in Chapter 2.10 in the Draft EA, and were added to Chapter 2.7 in the Final MP and EA. Text regarding the Treaty and the DOI Solicitors Opinion on the Clearwater River bed has been revised in Chapter 2.10 of the Master Plan. The Corps does not believe the MP will have any negative affect on Treaty rights or resources. As stated in Section 3-2.b of Engineer Pamphlet 1130-2-550, "The MP deals in concepts, not in details of design or administration. Detailed management and administration functions are addressed in the Operational Management Plan (OMP), which implements the concepts of the MP into operational actions." Future site specific actions taken under an OMP or otherwise will be subject to separate compliance and consultation, in accordance with applicable laws and regulations.</p> |

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| j) The commenter states the Tribe is also concerned that the draft MP and EA minimize the effect of the dam and reservoir on Tribal cultural resources. The MP (2-21) and EA (3.2.9) state: "Sites at Lower Granite Reservoir have been affected by reservoir related effects, including erosion, sediment deposition, development, and recreational activities. Sites have also been or could be affected by unauthorized actions, such as vandalism, looting, and cattle encroachments." | The FCRPS Systemwide Programmatic Agreement acknowledges that the dams and reservoirs, including Lower Granite Dam and reservoir have "... caused, is causing, and shall cause in the future direct, indirect, and cumulative effects...to properties included on, or eligible for inclusion on, the National Register of Historic Places... through inundation, erosion, exposure, and other factors" (BPA et al 2009:2). The Corps does not intend to minimize the effects to archaeological sites, however, the Master Plan presents management of Corps lands in broad terms, and the Corps is addressing effects to cultural resources through the FCRPS cultural resources program efforts and planning documents such as the OMP. |
| k) The commenter states the Corps still has not seriously addressed the adverse impacts to the Tribe caused by the construction of Lower Granite Reservoir or the subsequent inundation of Nez Perce archaeological sites, sacred and spiritual sites, traditional cultural properties (TCPs), and tribal allotments, and the removal of hundreds of Nez Perce ancestral burials | This comment is outside the scope of the Master Plan. The Master Plan is not related to the construction of the dam and reservoir, but instead is for current and future natural resource management operations. |
| l) The commenter states, "Although a goal of the EA (3-1) is to "[p]rotect and preserve archaeological and historical sites", funding provided through the Federal Columbia River Power System for local law enforcement and Corps archaeological staff is insufficient to meet the cultural resource preservation, protection, and mitigation needs that the Tribal technical staff and leadership have repeatedly identified for the Corps." | Cultural resource funding through the Federal Columbia River Power System is part of a formula including funds appropriated by Congress and those provided by BPA. A funding overview is presented in Chapter 6 the Cultural Resources Handbook (FCRPS 2016). |
| m) The commenter states, "The Tribe expects that the MP will allow the Corps to immediately address adverse impacts to cultural resources, regardless of the permitted uses of the land in question. The Tribe hopes that if a situation similar to Borgan's Island were to occur on the Lower Granite Reservoir, the Corps would not require several years of study, legal analysis, and public notification before the Corps would stop damage to an archaeological site, cemetery, or sacred place." | See comment response 3) g). |
| 4) Grazing/Ranching | |
| a) The commenter states they were also promised the use of the flat rock pit area of our property to feed cattle on in the winter. | The Corps has no information or documents confirming any access agreements for cattle feeding operations. |
| b) The commenter states they need to be able to have a temporary corral and loading area to be able to move cattle in or out or unload a saddle horse. The Corps will not allow this to happen. | Use of Corps managed federal lands for livestock operations can only be granted under Corps policy if such use would benefit natural resource management objectives, per ER/EP 1130-2-550. |

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| c) The commenter states the land needs to be grazed for fire prevention. | The Corps has not identified livestock grazing as an effective tool for fire prevention in relation to management objectives. Chapter 3 of EP 1130-2-550 states, "Agriculture or grazing use of project land is not a land classification but may be an interim use to meet management objectives." Livestock grazing can also lead to water quality impacts (depending on how/where it occurs); the spread of invasive species; and impacts to native vegetation, which could interfere with the Corps' wildlife habitat mission. |
| d) The commenter states The Corps wanted the rancher to add an additional fence at the take line which is not feasible. This would just be more barb wire that would be strung around for deer to be hung up on and more gates to open for livestock to get to water. | The Corp does not know the specifics of the comment. Some states, including Washington, have laws requiring livestock owners to keep their livestock from trespassing on to state and federal land (RCW 16.24.065). Fencing is a viable option to prevent livestock trespasses and fencing can be built that is wildlife friendly. |
| e) The commenter states that livestock grazing has provided to be excellent tools in controlling fuel loads (thus decreasing the chances of wild fires), grazing on foliage thus maintaining vegetation and minimizing growth, and they do not seriously degrade habitat. | See comment response 4)c). |
| f) The commenter is interested better stewardship of land, weed control, better management of pasture for fire control. | See comment response 4)c). |
| g) The commenters states that the inclusion of Figure 6-1 with livestock grazing has an implication of a livestock trail by the placement of the figure. This is clearly not a livestock trail and should be used in the correct context. | Figure 6-1 specifically states " illustrates how trails can impact wildlife lands to include erosion and soil loss". This in not attributing the trails or erosion to livestock grazing. |
| h) The commenter encouraged the Corps of Engineers to include grazing livestock as an important element of a sound and successful Lower Granite Master Plan. | See response to comment 4)c). Livestock grazing, haying, crop production and other agricultural activities are tools that may be used in the manipulation of vegetation and should not be used, or discontinued, where they may be reasonably expected to destroy or significantly alter plant and animal communities that occupy a project. The range and grassland management program will comply with the resource objectives and/or land use classifications stated in the Master Plan and Operational Management Plan. |
| i) The commenter states that grazing is the best way to reduce the fuel load short of ground sterilization. What would be the Corps plan to reduce the fuel load? | Annual fuel load reduction and ground sterilization are not always best for wildlife management. See response to comment to 4)b) |
| j) The commenter states that local ranch families had their land condemned and taken away at the price of rangeland and they were not paid to replace a fence on the new property line. The Corps built a fence on the line between the railroad and the corps land and openly allowed ranchers to use said lands for forty plus years through a verbal agreement | Not all lands acquired for the construction of the Lower Granite Dam were through condemnation as some were obtained through willing seller acquisition. The federal government was required to pay fair market value. The Corps was not required to fund any fence construction. The railroad fence that the commenter mentions was likely built as a result of the railroad relocation agreement. The Corps does not have any information or records to verify any verbal agreements. |
| 5) Invasive Plants | |

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| a) The commenter stated the Corps has been neglectful of taking care of weed problems in the areas and they also do not want the ranchers to spray the weeds | The Corps has a fairly robust integrated pest management program. Based on limited funding, the Corps must prioritize their efforts. The Corps may be open to allow adjacent landowners to treat weeds and coordinating weed reduction efforts to maximize benefits, but they must meet certain application requirements. |
| b) The commenter stated the Corps management is poor because a rock pit will only grow weeds if not properly taken care of and this causes a fire hazard during the summer months. | See comment response 5)a). Historically, the Corps has generally not engaged in weed control for the primary purpose of fire prevention, but will take this into consideration in future Wildland Fire Management Plans. |
| c) The commenter states the "Corps" property is notorious for having large patches of Kochia, Yellow star thistle, and Russian thistle that go uncontrolled which not only causes management issues for weed control, but a larger issue is the fire hazard it creates. | See comment response 5)b). |
| d) The commenter states, "This section (2.6.4) is an admittance of guilt of violating Washington state RCW 17.10.145 and an attempt to defend that violation by using "budgetary constraints" as an excuse. There are no details in the plan that state how the Corps is going to address this issue. This section as written is a serious management issue that must be scrutinized as the Army Corps of Engineers is clearly acting in a way that is detrimental to the ecosystem as a whole and must be held accountable. | See comment response 5)b). The Corps is very interested in completing as much weed control as possible, given budget constraints. The Corps is not subject to RCW 17.10.145, which is titled "State agencies' duty to control spread of noxious weeds." |
| e) The commenter states that invasive species may be deliberately introduced to areas because they are "thought" to be helpful in some way – this is very concerning. ...this section clearly is an admittance of the Army Corps of Engineers of the spread of noxious weeds. This spread of noxious weeds is of great concern to the neighboring or downwind landowners | See comment response 5)d). |
| f) The commenter states the draft plan should include specifics for aggressive invasive species prevention (see section title). It is the lack of compliance with Corps regulations and the Endangered Species Act that led to the development of the District-wide Integrated Pest Management Plan. If the Corps was in compliance with the above regulations, there would be no reason to have the specific IPMP. Sentence 2 of section 6.7 should be rewritten to be clear to any reader. Current IPMP does not protect or alleviate adjacent landowners or other producers downwind from IPMP failures and the plan should include mitigation strategies. | It was not the lack of compliance with Corps regulations or the ESA that led to the development of the Integrated Pest Management Plan (IPMP). The Corps prepared an IPMP based on guidance in ER/EP 1130-2-540. This action required an Endangered Species Act (ESA) consultation with other federal agencies which led to additional requirements and restrictions to reduce potential effects on ESA listed species. The IPMP is intended to address pest management on Corps managed federal land. The Corps is open to discuss coordinated weed management with adjacent landowners. |

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| g) The commenter states the Army Corps of Engineers, by its own admissions in this document, have helped the invasive species, both with purpose and through passive management. The lack of management on the part of the Army Corps of Engineers and the impact this lack has had on adjacent landowners and owners downstream and downwind. It is very concerning that the Army Corps of Engineers cannot take action until this consultation is complete, with no timeline in place for this consultation to be complete. | See comment response 5)d). Deliberate introduction of invasive species is part of the general discussion of this section and not related to a specific Corps action. The Corps lacks discretion to complete ESA consultation and/or comply with other applicable laws and regulations. |
| h) The Corps needs to step up their weed control. Feral rye has spread, yellow star thistle, scotch thistle and other weeds are prevalent on corps "managed" lands and they do spread to adjacent lands. | See comment response 5)a). |
| 6) Fire Management/Hazards | |
| a) The commenter states the Corps management is poor because a rock pit will only grow weeds if not properly taken care of and this causes a fire hazard during the summer months. | See comment responses 4)c) and 5)d). Historically, the Corps has generally not engaged in weed control for the primary purpose of fire prevention, but will take this into consideration in the future when developing Wildland Fire Management Plans. |
| b) The commenter states the land needs to be grazed for fire prevention. | See response to comment 4)c). |
| c) The commenter states the "Corps" property is notorious for having large patches of Kochia, Yellow star thistle, and Russian thistle that go uncontrolled which not only causes management issues for weed control, but a larger issue is the fire hazard it creates. | See response to comment 5)d). |
| d) The commenter states that livestock grazing has provided to be excellent tools in controlling fuel loads (thus decreasing the chances of wild fires), grazing on foliage thus maintaining vegetation and minimizing growth, and they do not seriously degrade habitat. | See response to comment 5)d). |
| e) The commenter states the draft plan "objectives" section is nebulous. Details should be provided for management on the majority of Corps owned land which is the rough, steep and rocky terrain of the project plan, fuel load reduction strategies currently and in the plan's future, prevention of Corps land fires to adjacent landowner's properties, prescribed burning and containment, Corps liability and mitigation to adjacent landowners for fire impacts. | The Master Plan objectives set the framework for management and the Operational Management Plan (OMP) is the document that details the specific actions that will be implemented. The OMP is discussed throughout the Master Plan and is introduced in Chapter 1.3. The OMP is a living document that is updated each year as work priorities change and budgets are received, and out years budget requests are made. The Fire Management Plan is an Appendix to the OMP document per EP- 1130-2-550 Chapter 3 2013. |

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| <p>f) The commenter states that reducing the fuel load through mowing activities is a significantly low impact on the fire danger. As previously written, the rough, steep, and rocky terrain of the Snake River Corridor does not allow for mowing. The limited areas that can be mowed, would also be areas that vehicles could get into allowing the fire to be managed. The areas that need to be discussed in this section are the steep and rough areas. How does the Army Corps of Engineers plan to reduce the fuel load in these areas? How does the Army Corps of Engineers plan to reduce the fire risk in areas that cannot be mowed? How does the Army Corps of Engineers plan to manage the fuel load over time? How does the Army Corps of Engineers plan to prevent the spread of fire to adjacent property? This section also discusses prescribed burning, please state how prescribed burning will be handled to prevent the spread of fire to private property. The Army Corps of Engineers also must accept liability for any fires started on Army Corps of Engineers managed property. Please state how the Army Corps of Engineers will fund this liability fund and manage said account?</p> | <p>See comment response 5)d) and 6)e).</p> |
| <p>g) The commenter in reference to section 3.4.5 states there have been a number of fires started on ACE managed lands, either through ACE mowing of the lands where they do mow, or guest using the provided and non-provided recreation areas. The fuel load needs to be reduced in these areas making it less likely for a fire to start or easier to control should one start.</p> | <p>See comment response 6)a). As mentioned in the Master Plan, Corps staff are working on a Fire Management Plan that will encompass fuel load reduction.</p> |
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| <p>7) Environmental Impacts</p> | <p></p> |
| <p></p> | <p></p> |
| <p>a) The commenter recommends that the final EA include more detailed information to better inform decision makers and the public of this project's potential impacts to: water quality, aquatic resources, invasive species, and air quality.</p> | <p>The Master Plan is a general planning document providing general direction and oversight to Corps natural resource management action over the next 20+ years through the evaluation and implementation of land classification units, which provide for primary and secondary allowed uses within each area. Detailed specific information related to the affected environment and environmental impacts will be provided during actions identified in the Operations Management Plan and site-specific proposals.</p> |
| <p>b) The commenter states the draft plan states erosion due to agriculture practices as a main factor in sedimentation entering the river. This is a general comment that cannot be properly applied as it clearly cannot apply to the areas identified in 2.4.1 as steep and rugged terrain. It does not identify where agriculture practices are leading to sedimentation in the river. Recreation in Washington could lead to a sedimentation load as could factors other than agriculture. This section must be re-written to be specific as to what areas the Army Corps of Engineers has identified tangible issues with ag practices contributing to sedimentation and must address the lack of management of the part of the Corps as a contributing factor.</p> | <p>Section 2.4.3 (Soils) is written at a watershed scale and previous work done to identify largest sediment inputs to the watershed above Lower Granite Dam were identified. This section does not link steep and rugged terrain with sediment erosion. The Corps does acknowledge that there are other factors that influence erosion such as human use, weathering processes, and steep slopes and rock fall, but the intent of this section was to talk about big picture soils and processes. The Corps does not agree that Section 2.4.3 requires modification.</p> |

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| c) The commenter states the Army Corps of Engineers needs to properly identify where they feel cattle grazing is leading to sedimentation in the river as the areas are mostly in this steep and rugged terrain | See comment response 7) b). |
| d) The commenter states the draft plan "objectives" section is ambiguous. Details should be provided of what conservation, protection, restoration and enhancements have been completed and what, specifically, will be done in the future. For example, what actions has the Corps taken on managed properties to conserve, protect, restore, and/or enhance these properties since 1975? | The Master Plan objectives set the framework for management and the Operational Management Plan (OMP) is the document that details the specific actions that will be implemented. The OMP is discussed throughout the MP and is introduced in Chapter 1.3. The OMP is a living document that is updated each year as work priorities change and budgets are received, and out years budget requests are made. |
| e) The commenter asked what actions has the Army Corps of Engineers taken on Whitman County managed properties to conserve, protect, restore, and/or enhance these properties since 1975? | See comment response 7) d). |
| 8) Recreation | |
| a) The commenter states that recreation is an important part of the Snake River. This draft plan should provide a current analysis of where this recreation takes place so that funds allocated for recreation can be spent on true recreational areas. Providing this information can help determine what land should be owned by the Army Corps of Engineers and what land owned is a burden to the public and the Corps maintenance budget. | Section 2.8 of the Master Plan gives an overview of recreation throughout project lands as well as recreational analysis, project visitation, and projected future use. Chapter 5 specifically lists all lands classified under High Density Recreation and are the areas used for visitation counts in Section 2.8. |
| 9) Real Estate/Land Conveyance | |
| a) The commenter states that this section (2.9) of the draft plan should identify all land owned by the Army Corps of Engineers within the plan project and which are classified as "passively" managed and actively managed by the Corps. Lands which are "passively" managed should be re-categorized as non-necessary. Lands with steep and rough terrain lacking in good native grasses have a lesser value for habitat than other properties in the area and should be considered nonessential. The draft plan should contain strategies which allow for these lands to be sold or traded, and to acquire lands which better meet the requirements for mitigation lands, habitat property or for recreational use. | Project lands are managed based on land classification, and classifications were updated in EP 1130-2-550 Chapter 3 (2013). There is no classification related to passive or active lands rather this refers to how intensive management might be on particular lands. |

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| <p>b) The commenter states this section (2.9) should identify lands which are not being managed by the Army Corps of Engineers or classified as "passively" managed by the Army Corps of Engineers as lands that should be reclassified or potentially traded or sold. Lands which are "passively" managed should be identified as non-necessary lands. The Army Corps of Engineers should develop a plan which allows for these lands to be sold or traded to acquire lands which better meet the requirement for mitigation lands, habitat property, or for recreational use.</p> | <p>See response to comment 9)a).</p> |
| <p>c) The commenter states the draft plan should provide the following: consideration for adjacent landowners to reasonably trade and/or purchase non-necessary lands (see above section 2.9), strategies for disposal of property that does not fulfill mitigation requirements of the Army Corps of Engineers and reacquire properties which will.</p> | <p>There were no 'non necessary' lands identified in the Master Plan. There is a process for land disposal through the Corps Real Estate Division. This specific information is outside the scope of the Master Plan process and document.</p> |
| <p>d) The commenter states this section (3.2.5) again needs a consideration for adjacent landowners and a section on how to dispose of property not meeting the mitigation needs of the Army Corps of Engineers and reacquire properties which will meet the needs of the Army Corps of Engineers.</p> | <p>See response to comment 9)c).</p> |
| <p>e) The commenter states the land under Army Corps of Engineers management was condemned prior to this management plan, and lands were taken from most if not all the adjacent landowners. . The draft plan should include discussion regarding the following: the historical use of verbal use permission between the Corps and adjacent landowners, the environmental value of cattle grazing in decreasing fire fuel load, minimizing noxious weeds where no weed management has or currently exists, improvement of wildlife habitat, the addition of organic matter and minimizing old growth vegetation to encourage new and stronger growth of wildlife forages. Also, the draft plan should include the advantages of an adjacent landowner/Corps collaborative management of the ecosystem having the greatest positive impact on wildlife habitat. An analysis should occur of lands where the historical adjacent landowner use has occurred and/or is/are occurring, and those lands that are under "passive" Army Corps of Engineers management. The Corps and this draft plan should provide strategies for reasonable land sale or trade to adjacent landowners, as it is the highest and best use of the property</p> | <p>See response to comments 4)c), 4)h), 4)j), and 5)a). Potential land sale or trade are outside the scope of this Master Plan.</p> |

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| <p>f) The commenter requests that encroachments should be looked at to see if the adjacent landowners, that are now being considered an encroachment, have had historical use of these properties. Verbal permission to use lands is now being considered an encroachment. There are many environmentally valuable benefits to cattle grazing, inclusive of decreasing the fire fuel, minimizing noxious weeds, and improving wildlife habitat with the addition of organic matter and minimizing old growth vegetation to encourage wildlife forages. Encroachments should be considered on a case by case basis and the benefits of these encroachments must be considered in any future action. Further, if the lands where the encroachments are occurring are under "passive" Army Corps of Engineers management, the Army Corps of Engineers should look to a land sale or trade to these adjacent landowners as the highest and best use of the property.</p> | <p>See response to comment 9)e).</p> |
| <p>g) The commenter makes the following requests with respect to Boyer Park: The port requests that USACE limit the current WSDOT Lease renewal of the airstrip at Boyer to 10 years versus 25 years. This shorter lease period may open an opportunity to the port for expansion of the park which the port believes to be a higher and better use of the area than the low usage WSDOT air strip. The port would like to explore the possible expansion of existing Boyer water rights or partial transfer of USACE water rights located on the south side of the Snake River should the port and USACE come to an agreement to expand Boyer Park and Marina for more diverse recreational opportunities as delineated above. Without water, an expansion of the recreation area may not be feasible.</p> | <p>Boyer Park is outside the area of operation for the Lower Granite Project which is the subject for the Master Plan revision. Your comments will be considered when the Master Plan for the Little Goose Project is revised.</p> |
| <p>h) The commenter states if the land the City of Asotin has authorization through WRRDA to acquire from the Corps had a designation "for conveyance," possibly it could streamline the eventual changes needed to the Master Plan when the land is actually conveyed. This would allow the public who references the plan to understand that a potential change in designation could/would occur. A part of the overlay could allow "mixed use" designations, which would encourage commercial activities that would then support the recreational purposes named.</p> | <p>In accordance with ER/EP 113-2-550, Master Plans can only include a limited number of land use classifications. "For Conveyance" or "Mixed Use" to encourage commercial activities are not authorized land use classifications.</p> |

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**U.S. ARMY CORPS OF ENGINEERS
WALLA WALLA DISTRICT
2018**