

Aquatic and Fisheries Resources Specialist Report  
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## **Kapka Sno-Park Project**

### **Environmental Consequences Direct, Indirect, and Cumulative Effects**

The project area is located within the 117, 638 acre 10<sup>th</sup> field Fall River-Deschutes River watershed (Hydrologic Unit Code 1707030103). There are no ephemeral, intermittent, or perennial streams, springs, seeps, riparian areas, wetlands, or floodplains within the project area, including the proposed parking area and trails. Dutchman Creek is identified on some maps and is within the project area. However, this is a relict outwash channel that was created by melt waters from alpine glaciers of the last Ice Age and has likely not carried water for thousands of years. Well-drained and highly permeable soil types facilitate a high rate of infiltration that alleviates runoff and the formation of natural drainage features. Precipitation quickly moves to groundwater. Therefore aquatic and fish habitat are absent from the project area. The nearest water feature from any vegetation clearing or ground disturbance associated with the project is the headwaters of the South Fork of Tumalo Creek, over 2 miles northeast of the proposed Kapka Sno-park and within a different watershed. The nearest water feature to the project area within the Fall River-Deschutes River watershed is Spring River 10 miles to the southeast. For these reasons there would be no direct, indirect, or cumulative effects to water quantity, water quality, wetlands, floodplains, aquatic habitat, and aquatic species including fish populations.

### **Aquatic Conservation Strategy Objectives Compliance (USDA, Forest Service, Northwest Forest Plan, 1994)**

The Aquatic Conservation Strategy (ACS) is a component of the Northwest Forest Plan and was developed to restore and maintain the ecological health of watersheds and aquatic systems contained within them on public lands. As part of the ACS, specific standards and guidelines require projects implemented on National Forest lands within the Northwest Forest Plan areas to “meet ACS Objectives”, “do not retard or prevent attainment of ACS Objectives”, or “attain ACS Objectives”. The nine Objectives were developed to manage land use activities to approach a goal of maintaining the natural disturbance regime. The approach seeks to prevent further degradation and restore habitat over broad landscapes. Forest Service lands within the range of the northern spotted owl will be managed to maintain and restore the following objectives:

*ACS Objective 1: Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations and communities are uniquely adapted*

There would be minor ground disturbance at a watershed scale under all action alternatives (.01% of the watershed). Impact to the distribution, diversity, and complexity of landscape-scale features such as timber stands, landslide-prone areas, and sensitive soils would be none to negligible. There would be no impact to the aquatic systems and landscape features that influence aquatic systems as no aquatic systems occur within the project area and the nearest

water feature within the watershed is located 10 miles away. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 2: Maintain and restore spatial and temporal connectivity within and between watersheds. Lateral, longitudinal, and drainage network connections include flood plains, wetlands, upsweep areas, headwater tributaries, and intact refugia. These network connections must provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species.*

None of the action alternatives affect drainage network connections as no floodplains, wetlands, upsweep areas, headwaters or aquatic refugia are located with the project area. Connectivity for aquatic and riparian-dependent species is not obstructed. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 3: Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.*

There are no aquatic systems within the project area. None of the action alternatives impact the closest aquatic systems, which are located 2 miles or more from the project area. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 4: Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.*

None of the action alternatives affect water quality as there are no aquatic systems in the project area. Water quality of the closest water bodies, located 2 or more miles away, would not be affected. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 5: Maintain and restore the sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.*

None of the action alternatives would result in overland flow of sediments to aquatic systems or transport of sediment as there are no aquatic systems within or near the project area. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 6: Maintain and restore in-stream flows sufficient to create and restore riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration and spatial distribution of peak, high, and low flows must be protected.*

None of the action alternatives would affect in-stream flows. The nearest stream in the watershed, Spring River, is located 10 miles away. The small amount of acres cleared for this project would not measurably affect evapo-transpiration rates of forest vegetation and the movement of precipitation to groundwater. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 7: Maintain and restore timing, variability, and duration of flood plain inundation and water table elevation in meadows and wetlands.*

None of the action alternatives would affect floodplain or meadow inundation, as there are no aquatic systems within or near the project area. Floodplain inundation of Spring River, located 10 miles away, would not be affected. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 8: Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distribution of coarse woody debris sufficient to sustain physical complexity and stability.*

None of the action alternatives would affect species composition or structural diversity of plant communities in riparian areas and wetlands as these features are not located within or near the project area. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

*ACS Objective 9: Maintain and restore habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian-dependent species.*

None of the action alternatives affect riparian-dependent plants, invertebrates, and vertebrates, as no riparian areas are located within or near the project area. The nearest riparian areas are nearly 2 miles from the project area. None of the action alternatives retard or prevent attainment of this objective at the local and watershed scale.

Summary: None of the action alternatives retard or prevent attainment of the 9 Aquatic Conservation Strategy (ACS) objectives at the local and watershed scale.

/s/Tom Walker