



6. ALTERNATIVES TO HCP THAT WOULD AVOID TAKE

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6.1 Introduction

A detailed discussion of the full range of alternatives considered for the HCP can be found in the Cedar River Watershed Revised EA/Final EIS. However, to meet requirements for an HCP under Section 10 of the ESA (see Section 2.3.2 of the HCP), a brief discussion is included here of alternatives to the HCP that would avoid take. This chapter provides an explanation of why these alternatives are not acceptable for City operations in the Cedar River Watershed in lieu of an incidental take permit based on the HCP. Alternatives that would avoid take are organized according to the three major components of the HCP: watershed management, mitigation for blockage to anadromous fish at the Landsburg Diversion Dam (anadromous fish mitigation), and instream flows.

Under these “No Take” alternatives to the HCP, the City of Seattle would not seek incidental take permits from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service for species listed as endangered, or species listed as threatened for which a take prohibition was in place under section 4(d) of the ESA. The City of Seattle would not implement an HCP to comply with the ESA or address currently unlisted species or threatened species for which no final 4(d) rule existed. Instead, City operations on the Cedar River and in the Cedar River Municipal Watershed would be conducted to avoid take of the species known to occur in the municipal watershed that are now listed under ESA as threatened with an existing final 4(d) rule (northern spotted owl, marbled murrelet, bald eagle, and bull trout); endangered (gray wolf), should they be found to occur in the watershed; or threatened with an existing final 4(d) rule (grizzly bear), should they be found to occur in the watershed.

City operations would be regulated by the federal government on a case-by-case basis as any additional species became listed under the ESA or additional final 4(d) rules were promulgated.

Uncertainty regarding compliance with the ESA is one of the dominant features common to the No Take alternatives described for all three components of the HCP. This uncertainty would continue over time. Requirements could stiffen, more species could be listed, or requirements could relax with changes in federal policy. As a result, the City of Seattle would need to respond as appropriate to these changes and take precautions to ensure regulatory compliance when guidance was lacking.

6.2 No Take Option for Watershed Management

In order to avoid take from watershed management activities, the City of Seattle would achieve compliance with the ESA by not conducting timber harvest activities, building roads, or conducting other land management operations within or near existing and potential habitat for listed species in a manner that would result in take of these species. Based on knowledge of the habitat associations and distribution of listed species in the municipal watershed (Section 3.5), it is likely that some timber harvest could be conducted in most of the previously harvested stands in the lower watershed, and in some parts of the upper watershed. No harvest would likely be conducted within old-

growth forest. However, the City's ability to plan timber harvest would be uncertain and would depend on the locations and activities of individuals of listed species. These locations and activities are likely to change over time, and future harvest would become more restricted if populations of these species in the municipal watershed were to increase.

This No Take option differs from the "No Action" alternative described in the Revised EA/Final EIS in that the No Take option likely could allow more timber harvest in some areas of the watershed, but harvest under the No Take option would be more uncertain. The No Take option differs from the four other alternatives analyzed in the Revised EA/Final EIS in that it would allow more timber harvest, not include commitment to an Ecological Reserve, and not include such measures as ecological thinning, restoration thinning, restoration planting, an increased level of road decommissioning and stabilization, and the variety of stream, riparian and upland restoration projects included in the HCP alternative. These activities would not take place under the No Take option.

Therefore, the No Take option for watershed management would not provide as much improvement in habitat over time, overall, for species addressed in the HCP as the HCP does. Furthermore, the No Take option for watershed management would result in uncertainty in the City's ability to conduct land management activities necessary to fulfill its obligations to the public for managing the watershed as a municipal water supply. For these reasons, the City is not pursuing the No Take option.

6.3 No Take Option for Anadromous Fish Mitigation

No species of anadromous fish are currently listed as endangered under the ESA or as threatened with a published take prohibition under section 4(d) of the ESA. Thus, the City's water supply operations that affect anadromous fish species could continue without alteration unless one or more of the species were to become listed under ESA or a final take prohibition were to be published for the threatened chinook salmon. Because sockeye salmon in the Cedar River are from an introduced stock, Cedar River sockeye are not eligible for listing under ESA (Section 3.5.8). One or more of the other anadromous salmonid stocks in the Cedar River could also be listed in the future.

The City does not believe that the existence of the Landsburg Diversion Dam causes take as defined by the ESA (Section 2.3.2), because the Landsburg facilities were in existence prior to initial passage of the ESA in 1973. However, should NMFS be able to show that the existence and operation of the dam causes take for any species that becomes listed, the City would have to develop an HCP and take actions for such species that include provisions to minimize and mitigate the impact of any taking caused by the Landsburg Diversion Dam to the maximum extent practicable. These actions could include construction of facilities at Landsburg to pass chinook salmon, coho salmon, steelhead trout, or sea-run cutthroat trout over the dam, depending on which species were to become listed. Construction of such facilities is part of the HCP and all other alternatives analyzed in the Revised EA/Final EIS except the No Action alternative. No actions regarding sockeye salmon would be required under the No Take option.

This No Take option differs from the No Action alternative analyzed in the Revised EA/Final EIS in that the No Take option would not include mitigation for sockeye. Under the No Action alternative in the Revised EA/Final EIS, a prototype hatchery would continue to be operated for sockeye, but no firm commitments are made to mitigation for other species. Under both the No Take option and the No Action alternative analyzed in the Revised EA/Final EIS, mitigation would be provided to species on a case-by-case basis at the time of listing as endangered or publication of a final 4(d) rule for threatened species. The No Take option differs from the four other alternatives analyzed in the Revised EA/Final EIS in that it would not include long-term mitigation for sockeye or a commitment to construct facilities to pass chinook, coho, and steelhead over the Landsburg Diversion Dam, regardless of whether any of these species were to be listed.

The No Take option for anadromous fish mitigation would not provide certainty regarding any requirements under the ESA regarding mitigation that might be required for the Landsburg Diversion Dam, and it would not provide the substantial benefits to anadromous fish species that are included in the HCP. For these reasons, the City is not pursuing the No Take option.

6.4 No Take Option for Instream Flows

As noted above in Section 6.3, no species of anadromous fish is currently listed as endangered under the ESA or as threatened with an existing take prohibition under section 4(d) of the ESA. Thus, the City's water supply operations that affect anadromous fish species could continue without alteration unless one or more of the species were to become listed under ESA or unless a 4(d) rule is published for the threatened chinook salmon. As indicated in Section 6.3, sockeye salmon in the Cedar River are not eligible for listing under ESA. Puget Sound chinook salmon have been listed as threatened by NMFS, but no final 4(d) rule has been published. One or more of the other anadromous salmonid stocks could be listed in the future.

The ways in which management of instream flows could cause take are not clear. Regulations define take to include significant habitat modification or degradation, but only where it actually kills or injures wildlife (Section 2.3.2). Such actions as rapid downramping of flows in a manner that strands and kills fish would constitute take, as would entrainment of fish into water intakes.

If a species of anadromous fish were to become listed, the City would have to develop an HCP and take actions for that species that includes provisions to minimize and mitigate the impact of any taking caused by the management of instream flows and water diversion. These actions would likely include downramping limitations for such species and measures to avoid entrainment, such as construction of protective screens on the water intake at Landsburg. The No Take option could also include requirements regarding regulation of instream flows, but the form of those requirements is uncertain. No actions regarding sockeye salmon would be required under the No Take option.

Under the "No Action" alternative described in detail in the Revised EA/Final EIS, instream flows would continue to be managed according to the non-binding instream flows established for the Cedar River by WDOE in 1979 (Section 2.2.5), which provide habitat for all anadromous species but do not include downramping limitations. The

HCP alternative provides substantial benefits for all anadromous species compared to the No Action alternative.

Uncertainty regarding compliance with the ESA characterizes the No Take option, because as time goes on requirements could stiffen, requirements could be relaxed, or species potentially affected by instream flows in the Cedar River could be listed. If a final 4(d) rule were to be published for chinook salmon in Puget Sound, the City would be required to manage flows on the river in a manner that would meet the requirements of the ESA for chinook, some of which are not clear at this time. Management of flows in this way could end up being at the expense of other unlisted species of concern, such as sockeye, coho, or steelhead.

In preparing this HCP, the City of Seattle is seeking certainty with respect to its ability to supply water to its customers in the future (Section 2.4). This No take option does not provide such certainty, and it would not provide as many benefits to anadromous fish as the HCP. For both these reasons, this No Take option is not as suitable as the HCP, which both maintains the predictability of the City's water supply operations on the Cedar River and includes instream flow management in the river that will provide benefits to a variety of fish species, including chinook salmon, sockeye salmon, coho salmon, and steelhead trout.

The No Take option for instream flows would not provide certainty regarding future water supply under the ESA, and it would not provide the substantial benefits to anadromous fish species that are included in the HCP. For these reasons, the City is not pursuing the No Take option.

6.5 Conclusions

In general, the No Take options are not as suitable for City operations on the Cedar River Watershed as the HCP proposal. The City of Seattle is responsible for providing a safe, reliable and adequate supply of water to the homes and businesses in the City and, through supply contracts with other jurisdictions, to most of the metropolitan area. This responsibility is accompanied by very high standards for water quality to protect public health and for reliability in meeting a wide range of basic needs, including water for fire protection and for use by many residential and commercial customers. The City is also responsible for providing reliable electric service to residents and businesses in Seattle and adjoining areas. The City is obligated to provide all of these services at a fair and affordable cost. In addition, the City is also responsible for minimizing actual and potential environmental impacts from its operations through very high standards of environmental protection, restoration, and mitigation.

The No Take options would not allow the City to fulfill these obligations to the fullest extent. For example, the HCP commitments for watershed management would provide greater habitat protection and improvements than the No Take option. The No Take option for anadromous fish mitigation would not provide certainty with regard to mitigation for the Landsburg Diversion Dam, and would not provide the substantial benefits to anadromous fish that the HCP does. The No Take option for instream flows would result in an uncertain regulatory climate that would inhibit long-range water supply planning for the region, and that could force management of flows in the river to focus on the needs of individual species as they become listed under the ESA, rather than

providing for the needs of all species of anadromous fish as does the HCP. The No Take option for instream flows would not provide the substantial benefits to anadromous fish that the HCP does.