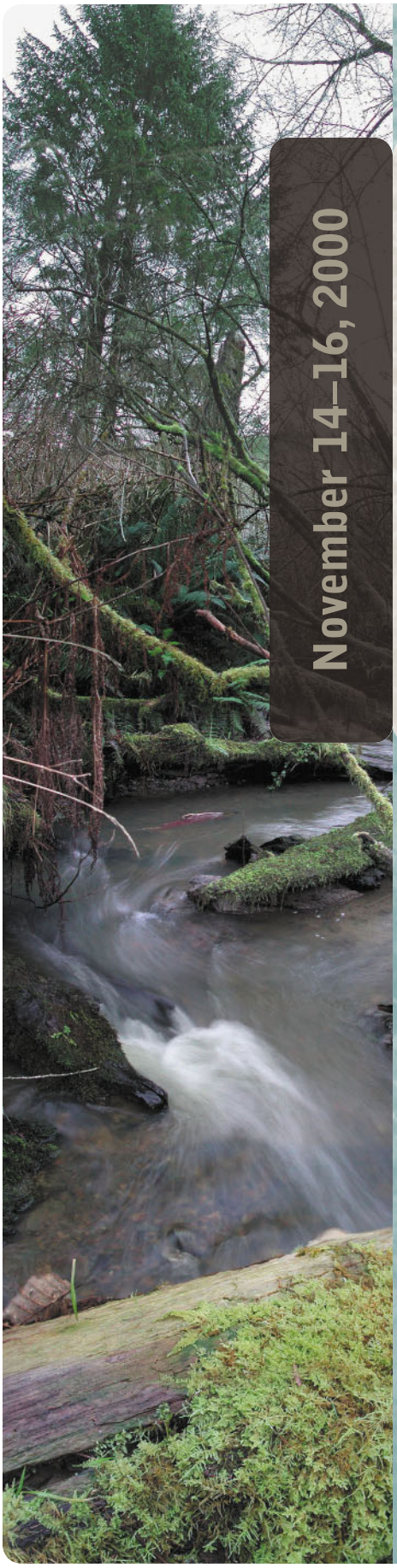

November 14–16, 2000

Proceedings of the Salmon Habitat Restoration Cost Workshop

Oxford Suites Hotel
Gladstone, Oregon

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Salmon Habitat Restoration Cost Workshop

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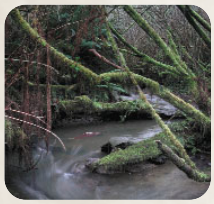
Twenty-six Pacific salmon and steelhead stocks are currently listed as threatened or endangered under the Endangered Species Act (ESA). While the ESA specifies that the decision to list be based solely on biological criteria, it also requires that recovery plans for listed stocks reflect some consideration of economic effects. Specifically, the ESA states that "The Secretary [of Commerce, in the case of salmonid stocks], in developing and implementing recovery plans, shall, to the maximum extent practicable ... incorporate in each plan ... estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve immediate steps toward that goal" (ESA Section 4.(f)(1)).

While habitat restoration is an important aspect of recovery planning, information on restoration costs is very limited. To help address this information gap, the National Marine Fisheries Service and the Pacific States Marine Fisheries Commission organized a Salmon Habitat Restoration Cost Workshop, which was convened on November 14-16, 2000 in Gladstone, Oregon. The goal of the workshop was to evaluate the feasibility of developing and applying standardized methodologies to estimate salmon habitat restoration costs.

The workshop included an overview session as well as five additional sessions, each dealing with a specific type of restoration activity (see workshop agenda). Presentations were made by restoration practitioners representing a variety of disciplines (e.g., engineering, biology, forestry, geology, hydrology, economics) and entities (federal, state and local government agencies, non-governmental organizations, private industry, private consultants). In addition to identifying important cost factors, presenters were asked to address the following questions:

1. Are there formulas or rules of thumb that can be used to estimate restoration costs at the individual project level?

2. Is it possible to extrapolate restoration costs from individual projects to a large geographic scale, such as a watershed or evolutionarily significant unit?

3. If extrapolation is possible, how should it be done, what kinds of data would be needed and how would those data be obtained?

The workshop focused solely on restoration involving engineered modifications to the existing landscape and the direct costs associated with carrying out such projects. It is important to note that restoration takes other forms as well, such as restrictions on commercial and non-commercial uses of habitat (e.g., prohibition on timber harvest in a riparian area, closure of a decommissioned road to activities such as hiking). From an economist's perspective, a comprehensive analysis of restoration costs would include not only direct restoration project costs but also opportunity costs associated with land use restrictions that are intended to improve habitat. The focus of this workshop on direct project costs should therefore not be interpreted to imply that these other cost components are not relevant and important, but rather reflects the need to limit the scope of the workshop to what could be accomplished in a few days.