

Chapter 1 – Introduction and Purpose of the Assessment

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Introduction and Purpose of this Assessment

This document is the product of a watershed assessment for Pringle, Glenn-Gibson, Claggett and Mill Creek watersheds. It provides current and historic information on the physical, biological and cultural landscape in the four watersheds. The main focus of the assessment was a synthesis of existing data sets and studies pertaining to the four watersheds in order to provide a clear picture of the condition and health of the watersheds at this point in time. This assessment did not collect any new data other than what could be gleaned through geographical information systems (GIS) analyses.

There are two main purposes of this assessment. First is to help council members understand how their watersheds function at an ecological level. This means bringing together all the pieces of the “watershed puzzle” by explaining all the different functions of a watershed and how these functions interrelate. Aspects of the watershed that were studied include historical conditions, water quality and quantity, soils, aquatic and terrestrial habitats, and fish and wildlife. These aspects or functions are dealt with in separate chapters, although their interrelationships become evident when reviewing this document. Every chapter in this document provides background information or a “textbook” explanation of the importance of each watershed aspect. We believe the inclusion of this information was necessary in order for council members and people with non-science backgrounds to understand watershed-specific data provided in this document.

The second purpose of the assessment is to provide information to both council members and members of the community. At a watershed council level, the assessment results can be used to: 1) identify aspects of the watershed that warrant further study and 2) identify ecological functions and habitat types that would benefit from restoration or enhancement. Please note that the assessment does not identify specific locations or pieces of property in need of restoration or enhancement. The purpose of the “Action Plan”, the next step in the planning process for the watershed councils, will be to identify specific sites for future restoration and enhancement work based on the information provided in this document.

This document provides a scientific framework for future decision-making in both the public and private sector. Considerable efforts have been made by the authors not to pass judgment or to incorporate the judgments or opinions of others on any particular activity, land use or agency in this document. Recommendations provided at the end of each chapter are based on science and/or the limited information compiled on each subject.

This assessment is a **living document**. It is the intent of the watershed councils to add information to this document as it is collected and analyzed by the watershed councils, other volunteer organizations, government agencies, schools and universities and other organizations. The assessment will be formally updated on a biannual basis. Assessment revisions will be distributed to current assessment recipients.

Methods

The guidance to develop and write this assessment came from two watershed assessment manuals and the questions resulting from an initial meeting of the Intercouncil Watershed Assessment Committee (IWAC). The first manual, the *Oregon Watershed Assessment Manual* (OWAM) (Watershed Professionals Network 1999), was developed specifically for watersheds in Oregon. This manual was used as the basic framework for this assessment. Because the manual was specifically written about large rural watersheds, we used the *Rapid Watershed Planning Handbook: A Comprehensive Guide for Managing Urbanizing Watersheds* (Center for Watershed Protection 1998) as a supplemental guide. Due to time constraints, funding shortfalls and applicability to urban watersheds, not all methods presented in both documents were employed in this assessment (e.g. field verification of wetlands and sediment sources). For the same reasons, not all of the questions generated by IWAC were answered. However, we were able to use information generated from GIS to integrate several data sources and come to some meaningful conclusions.

Channel Habitat Typing (CHT) information for Claggett, Glenn-Gibson, Mill and Pringle creeks is not included in this assessment edition. CHT research will continue and findings will be incorporated into revised assessment editions. Action plans for each watershed will be developed after the CHT work is complete.

Geographic Information Systems (GIS)

All of the maps and most of the quantitative information (e.g. percentage of land use/watershed, percentage impervious surface, etc.) presented in this document were created using GIS. GIS is the compilation of information by specific location, creating the ability to compare different information in relation to spatial locations. The advantage of using GIS, as opposed to paper maps, is that different layers can be combined on a computer to produce quantitative estimates of landscape features. For example, a layer showing the location of current wetlands in the four watersheds was overlaid on a layer showing the location and extent of hydric soils in the watersheds (i.e. soils that are highly impermeable to water). This combination produced a map showing the probable extent of historic wetlands and the location and acreage of existing wetlands. From this information we can estimate the wetland loss in each watershed since European settlement.

Enclosed watershed maps have been reviewed and corrected within the limited financial resources available. Recently generated information on topics such as delineated wetlands or fish species present may not be reflected in these maps. Future assessment revisions will incorporate new research findings.

Public Participation

To guide the preparation of this document a committee consisting of 33 technical advisors, government agency representatives and watershed council members was convened in late November of 2000. The purpose of the first meeting was to identify issues of importance in the four watersheds that may affect water quality and fish habitat. Meeting participants were asked to develop five questions/issues for each of the following topics as outlined by the OWAM: hydrology and water use, riparian/wetland habitat, sediment sources, channel modifications, water quality and fish and fish habitat. The authors of the assessment then attempted to address these questions/issues while compiling data and writing the chapters. The issues are listed in a sidebar at the beginning of each chapter.

Draft chapters of the watershed assessment were mailed to committee members as they were completed. Many committee members provided their comments in writing to the authors within a month of receiving a draft chapter. Other committee members attended scheduled meetings in which they provided verbal comments to the authors directly. Five meetings were conducted for the review of six chapters.

Members of the Intercouncil Watershed Assessment Committee (IWAC)

We thank the many members of this committee for their time and expertise for reviewing this document. Many of the committee members also provided information and data that helped shape the watershed assessment. Members are listed in alphabetical order and include their affiliation.

Les Bachelor.....Natural Resource Conservation Service
Jeff Bickford..... Marion County Solid Waste Management
John Borden..... Oregon Department of Environmental Quality (retired)
Jim Castle..... Glenn-Gibson Watershed Council
Barbara Ellis-Sugi.....United States Forest Service
Dana Fields..... Oregon Division of State Lands
Monte Grahamn.....Marion Soil and Water Conservation District
Gary Galovich..... Oregon Department of Fish and Wildlife
Sue Geniesse..... Friends of Mill Creek
Derek Godwin..... Oregon State University Extension Service
Mike GotterbaPringle Creek Watershed Council and SumcoUSA
R. Mark HaddenOregon Water Resources Department
Mark Hamlin.....Oregon Department of Environmental Quality
Lee Hettema Claggett Creek Watershed Council

Wayne Hunt Oregon Department of Fish and Wildlife
 Dave Johnson Natural Resource Conservation Service
 Susan Kephart Biology Department at Willamette University
 Wendy Kroger Pringle Creek Watershed Council
 Chris Kuenzi Marion Soil and Water Conservation District
 Diane Maul City of Turner
 Frank Mauldin City of Salem Public Works Dept.
 Austin McGuigan Polk County Community Development Dept., Planning Division
 Lisa Milliman Marion County Community Development Dept., Planning Division
 Terry Nelson Natural Resource Conservation Service
 Frank Reckendorf Water Quality Consultant
 Alison Rhea Environmental Science and Assessment
 Tina Schweickert City of Salem Community Development Dept., Natural Resources
 Peter Scott Pringle Creek Watershed Council
 Dennis Sigreist Oregon State Police, Office of Emergency Management
 Dorald Stoltz Glenn-Gibson Watershed Council
 Bill Warncke Pringle Creek Watershed Council
 Bob Williams Claggett Creek Watershed Council
 Jon Yoder Friends of Mill Creek and North Salem High School

Additional Reviewers of the Assessment

In addition to the Intercouncil Watershed Assessment Committee, other experts provided input and constructive criticism when needed. We appreciate their efforts and value their input.

Steve Downs City of Salem Public Works Dept.
 Bill Ferber Oregon Water Resources Department
 Jeane Fromm City of Salem Community Development Dept., Natural Resources
 Peter Gutowsky City of Salem Community Development Dept., Natural Resources
 Monte Graham Marion Soil and Water Conservation District
 Ernst Lau Marion Historical Society
 Jeanne Miller City of Salem Environmental Services
 Heather O'Donnell City of Salem Community Development Dept., Natural Resources
 Ken Roley City of Salem Public Works Dept.
 Larry Trosi Santiam Water Control District

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