Section 1 Introduction

This document presents the results of an innovative planning process involving irrigation activities in the Sequim-Dungeness Valley area of Washington State. It is one of several pilot projects in the State involving development of a Comprehensive Irrigation District Management Plan (CIDMP). The Dungeness River Agricultural Water Users Association (DWUA) has led this pilot project, representing seven public and private irrigation organizations in the area. Extensive input was provided by representatives of local, state, tribal and federal organizations as well. This effort contributes to ongoing collaborative activities in Clallam County (County) that foster sound management of water resources and environmental quality.

As a pilot project, the CIDMP has been experimental in nature. The original intent was to develop binding agreements between the DWUA and state and federal regulatory agencies that would identify actions to be carried out by DWUA and corresponding assurances from the agencies regarding compliance with the Endangered Species Act and Clean Water Act. At the time this plan was finalized, suitable assurances had not been agreed to. Therefore, this plan provides a record of the actions contemplated under the pilot process. While DWUA has in good faith pursued ESA assurances through the CIDMP process, DWUA believes its ongoing activities fully comply with all laws, and nothing in this document is intended to suggest otherwise. DWUA intends to strive to carry out actions listed in this plan, as part of its ongoing efforts to contribute to collaborative management of water resources of the Dungeness River Basin. However, DWUA is not obligated to carry out these actions under current law or agreements. Its ability to implement this plan is largely controlled by access to funding from outside sources.

1.1 Water Users Association

The DWUA is composed of irrigation districts and private irrigation companies in the Sequim-Dungeness Valley area¹. The seven members of DWUA are:

- Agnew Irrigation District
- Clallam Ditch Company
- Cline Irrigation District
- Dungeness Irrigation Company
- Dungeness Irrigation District
- Highland Irrigation District
- Sequim-Prairie Tri-Irrigation Company²

 ¹ The authorized representative for DWUA is Mike Jeldness, Coordinator. Contact information for DWUA and its authorized representative is as follows:
 4850 Lost Mountain Road
 Sequim, WA 98382

These seven irrigation organizations divert water primarily from intakes on the Dungeness River, and deliver the water to users throughout the area. One district, Agnew Irrigation District, also has a diversion on McDonnell Creek (a.k.a. McDonald Creek).

The DWUA was formed to coordinate water conservation and water resource management activities associated with irrigation works in the Dungeness Valley and Sequim area. The DWUA has a Board of Directors representing the respective districts and companies, and appoints a Water Coordinator to assist in overall water resource management. Subject to approval by DWUA members, the DWUA has the ability to adopt policies, rules and regulations that apply to all of its members as well as to enter into agreements with outside organizations.

The seven districts and companies retain their organizational identities, separate from the DWUA. Capital facilities such as diversion structures and canals are owned by each of the seven respective members of the organization, not by the DWUA. Each of the DWUA members has its own elected Board or private ownership structure, depending on whether it is a public entity or a private company. Each of the districts and companies collects fees or assessments from individual landowners within the boundaries of the area served by its own irrigation works.

1.2 CIDMP Process

1.2.1 Origin of CIDMP Process

The CIDMP process was developed at the statewide level by a working group of Washington State's Agriculture, Fish, and Water (AFW) process. The purposes and process for developing a CIDMP are described in *Guidelines for Preparation of Comprehensive Irrigation District Management Plans*, produced by the Washington Conservation Commission in May 2001. Participants in developing these guidelines included representatives of the agencies charged with implementing the Endangered Species Act and Clean Water Act within the State of Washington, namely National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS) and the Washington State Department of Ecology (Ecology).

The CIDMP process is a voluntary, incentive-based approach that provides a means for irrigation entities to meet requirements under the Clean Water Act (CWA) (33 U.S.C. §§ 1251 et seq.) and the Endangered Species Act (ESA) (16 U.S.C. §§ 1531 et seq.) and continue supplying water to meet local irrigation needs. This effort, in conjunction with actions by other parties in a watershed, can lead to higher streamflows during the late summer and early fall, improvements in water quality, and better prospects for recovery of listed species.

The CIDMP process used in preparing this Plan has the following 10 steps:

- 1. Define objectives, assess options and determine need for CIDMP;
- 2. Establish Technical Advisory Team;
- 3. Define key planning parameters;

² Formed by merger including Sequim-Prairie, Eureka and Independent Irrigation Cos.

- 4. Inventory district facilities, operations and needs;
- 5. Assess district impacts on water quality and fish habitat and determine needs;
- 6. Develop comprehensive action plan;
- 7. Define implementation program;
- 8. Produce CIDMP document;
- 9. Perform SEPA/NEPA review;
- 10. Complete agreements with agencies.

The DWUA tailored each step in the approach to meet the particular circumstances of the Dungeness-Sequim area and its irrigation facilities and operations. The contents of the resulting CIDMP are intended to meet the Services' regulatory requirements for issuance of an ESA Section 10(a)(1)(B) Habitat Conservation Plan. See 50 C.F.R. § 222.307 (NMFS regulations); 50 C.F.R. § 17.22 (USFWS regulations).

1.2.2 Relationship of CIDMP to Incidental Take Permit

It was originally intended that DWUA would apply for Individual Incidental Take Permits (ITPs) from NMFS and USFWS (collectively "the Services"), under Section 10 of the ESA and related agency implementation regulations. Securing these permits was desirable as one element to help ensure the long-term viability of agricultural activities in the Sequim-Dungeness Valley area. Activities for which coverage under the ITPs was desired are described in Section 2 of this Plan. In general, these practices include the continued diversion and conveyance of water for irrigation purposes; operation and maintenance of diversion facilities and irrigation ditches; and tailwater discharges.

DWUA proposed to hold and implement the ITPs on behalf of its members. The ITPs were expected to cover the activities of DWUA members ("covered activities;" see section 2) conducted on member lands ("covered lands;" see Section 3). DWUA was to oversee ITP and Habitat Conservation Plan (HCP) implementation, and DWUA was to continue in its coordinating role to ensure efficient implementation of conservation actions. DWUA possesses the requisite authority to ensure member compliance with ITP terms and conditions as a result of authority vested in it by law and contract.

The CIDMP was originally intended to provide the documentation needed to support issuance of the Incidental Take Permits, and serve as a HCP. Consistent with federal regulations regarding issuance of an Incidental Take Permit under Section 10 of the ESA (50 CFR Parts 13, 17, and 222), the portions of this CIDMP that address habitat conservation provide information on the following items:

- List of species for which the Incidental Take Permit is desired (Covered Species);
- Description of proposed activities by DWUA;
- Anticipated impacts of these activities on the Covered Species and their habitat;
- Measures that will be taken to monitor, minimize and mitigate these effects, and funding available to implement these measures;

- Alternative actions that were considered and the reasons why these alternatives are not being used; and,
- Documentation of data sources used in preparing this CIDMP.

Discussions were held between the DWUA and Services over a period of time in 2005 and 2006 regarding the actions in this document and the prospective issuance of the proposed ITPs. While these discussions were productive, the parties were unable to reach agreement on certain key elements of the proposed permit application. Thereafter, due to funding limitations and other considerations, DWUA and the Services concluded that development of the ITP applications should be set aside at this time.

Because an ITP is not being pursued at this time, the actions listed in this plan do not represent firm commitments by DWUA. They should be viewed as actions which, if funded, could provide environmental benefits within the Dungeness River Basin. DWUA intends to pursue funding to carry out these actions, but is not bound to do so by any agreement with the Services.

This CIDMP also contains analysis and actions pertinent to water quality protection. Those actions are unrelated to the ITPs. This is discussed further in the following section.

1.2.3 Relationship of CIDMP to Water Quality

The CIDMP process also envisions a link between the CIDMP and water quality protection under the Clean Water Act. Representatives of DWUA met regularly with the Washington State Department of Ecology during preparation of this Plan. The federal Clean Water Act does not provide clear authorization or procedures for issuing a permit analogous to an Incidental Take Permit. Under the pilot CIDMP process, options for formalizing commitments by DWUA and Ecology were explored. However a suitable mechanism to provide assurances on both sides was not found. Therefore, while DWUA intends to strive towards implementing the set of actions related to water quality, DWUA is not obligated to do so under any agreement with Ecology.

Because of differing processes involving the ESA and CWA, this plan distinguishes between actions related to the federal Incidental Take Permit and actions related to water quality.

1.2.4 Technical Advisory Team

At the outset of the CIDMP planning process, the DWUA invited a diverse group of technical experts and agency representatives to serve on a Technical Advisory Team (TAT). Members of the TAT are listed on the Participants page at the front of this document. It includes representatives of the agencies responsible for implementing the CWA and ESA within the State of Washington, as well as other organizations with management responsibilities or regulatory roles in the Sequim-Dungeness Valley area. The role of the TAT has been to provide input and guidance during development of the CIDMP, and to review interim work products as the CIDMP document was prepared.

The document itself was prepared by a private contractor, HDR Engineering, Inc. (formerly Economic and Engineering Services, Inc.), under contract to DWUA. Montgomery Water Group, Inc. and R2 Resource Consultants, Inc. also participated in the project. Funding for the project was provided by grants from state and federal agencies. The DWUA and HDR worked closely with the TAT over an eight month period to develop this plan.

1.3 Covered Lands and Action Area

There are four important geographic areas and concepts for the CIDMP including covered lands, action area, direct effects area, and indirect effects area. Exhibit 1-1 shows the action area and its vicinity on the Olympic Peninsula. Exhibit 1-2 shows the covered lands.

Covered lands are defined as all lands within the official boundaries of the seven DWUAmember irrigation districts and companies. Virtually all irrigation system related facilities, including but not limited to, diversion intakes, intake channels, headgates, fish screens, bypass channels, dams, fish ladders, canals, laterals, and tailwater sites occur within irrigation district/company boundaries and are therefore part of the covered lands. There are only two exceptions where irrigation facilities are not within an irrigation district/company boundary. The first is a Sequim-Prairie Tri-Irrigation Company tailwater site and the second is a Highland Irrigation District piped lateral. These two sites are additionally included in the covered lands.

The general boundaries of DWUA lands are as follows. DWUA land west of the Dungeness River, which includes Agnew Irrigation District, Clallam Irrigation Company, Cline Irrigation District and Dungeness Company, is bounded by: the Dungeness River to the east, Siebert Creek to the west, Agnew Canal to the south and the Strait of Juan De Fuca to the North. These combined "western" irrigation entities also include a portion within the Northeast Quarter of Section 23, Township 30 North, Range 5 West. DWUA land east of the Dungeness river, which includes Highland District, Sequim Prairie Tri Company and Dungeness District, is bounded by: the Dungeness River to the west, Highland Canal to the south, Johnson Creek to the southeast and the Strait of Juan De Fuca to the north and east. These combined "eastern" irrigation entities exclude the following sections: Sections 30 and 32, Township 31 North, Range 3 West; sections 4, 5 and 8, Township 30 North, Rand 3 West. These combined "eastern" irrigation entities also exclude portions of the following sections: Sections 25 and 36, Township 31 North, Range 4 West; Sections 1 and 12, Township 30 North, Range 4 West; Section 31, Township 31 North, Range 3 West; and Sections 6, 7and 9, Township 30 North, Range 3 West.



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The action area is slightly larger than the covered lands and is subdivided into two categories: direct effects area and indirect effects area, as defined below. The action area is bounded by the Agnew diversion at Dungeness River Mile 11.2 and the Agnew main canal to the west and the Highland main canal to the east. All lands north of these boundaries are in the action area. The action area comprises approximately 30,000 acres of land in eastern Clallam County ranging in elevation from sea level to 700 ft (msl). The action area includes the lower portion of the Dungeness River watershed, as well as lands outside the Dungeness River watershed. The action area also incorporates the rapidly developing urban area of the City of Sequim.

- The direct effects area includes habitats under the direct influence of the covered activities. This includes all surface water drainages encompassing lands situated between Johnson Creek to the east and Siebert Creek to the west that support irrigation diversions, the network of irrigation ditches, and any surface body of water receiving tailwater discharge.
- The indirect effects area includes downstream habitat areas that may experience indirect or delayed effects of the covered activities. The indirect effects area includes small streams and wetlands experiencing increases in water volumes as a result of irrigation system leakage via groundwater pathways, the near shore estuarine areas in Dungeness Bay, the north coast of east Clallam County adjacent to the direct effects area, portions of the Strait of Juan de Fuca receiving inflows from the Dungeness River or independent creeks within the action area.

1.3.1 Land Use

Land use within the Covered Lands and Action Area includes agricultural, rural, suburban, and urban and is shifting due to significant population growth. Historically, the area was forest and open prairie covering the alluvial fan formed where the Dungeness River exits a confined valley in the Olympic Mountains. Agricultural development began with Euro-American settlements in the mid 1800's. The land is within the "rain shadow" of the Olympic Mountains and typically receives less than 20 inches of rain per year. The irrigation works began in the late 1800s and made extensive farming possible in the area.

The population boom in Western Washington in recent decades caused significant conversion of agricultural lands to rural and suburban residential communities. Land use is guided by the County-Wide Comprehensive Plan and Clallam County zoning codes. Residences occur throughout the Covered Lands and Action Area, with their highest density in the City of Sequim. Commercial and light industrial development occurs primarily adjacent to U.S. Highway 101. Currently, the area is experiencing rapid growth. The population in unincorporated Clallam County has increased 16% from 1990 to 2000 (Sargent, 2002). Most of this urbanization is occurring near the City of Sequim. The majority of the population within the Covered Lands and Action Area relies on septic systems. The only areas on a sewer system are the City of Sequim and a residential development in the north-central area of the Covered Lands and Action Area serving approximately 800 people.

The DWUA currently delivers water to about 5,800 acres in the Sequim-Dungeness area (see Exhibit 1-2). Of that area, about 5,000 acres is used for agricultural irrigation and

the remainder is residential and recreational use. The amount of agricultural irrigation has declined since 1996 by about 400 acres while domestic use has increased by about 250 acres. This trend is consistent with long term trends, as agricultural lands in the area have gradually been converted to residential and other uses since the 1970s.

1.3.2 Water Bodies

Water bodies in the Covered Lands and Action Area include the Dungeness River and its tributaries, below River Mile 11.8; a number of independent creeks, and saltwater bays adjacent to the irrigated area. These water bodies are shown in Table 1-1. There are also numerous wetlands within the Covered Lands and Action Area. Further information on the Dungeness River, independent creeks and wetlands is provided in Section 4.

Table 1-1Water Bodies in the Covered Lands and Action Area		
Dungeness River and Tributaries	Independent Creeks	Bays (saltwater)
Dungeness River	Bell Creek	Dungeness Bay
Bear Creek	Cassalery Creek	Sequim Bay
Hurd Creek	Cooper Creek	Strait of Juan de Fuca adjacent to mouths of Dungeness River and independent creeks
Lotzgesell Creek	Gierin Creek	
Matriotti Creek	Golden Sands Slough	
Mudd Creek	Johnson Creek	
	McDonnell Creek	
	Meadowbrook Creek & Slough	
	Siebert Creek	

1.4 Organization of Document

This CIDMP document provides extensive information on irrigation facilities and operations, and their relationship to water quality and habitat conditions for covered species. It identifies activities desired for coverage under the ESA and CWA. It also describes new actions that could be taken to minimize and mitigate potential effects of irrigation activity on water quality and the covered species. Finally, it describes a proposed implementation program. This document is organized into the following 8 sections:

- Section 1 Introduction
- Section 2 DWUA Facilities and Operations
- Section 3 Covered Species and Habitat Types
- Section 4 Baseline Conditions
- Section 5 Assessment of Existing Effects on Water Quality and Aquatic Resources
- Section 6 Conservation Measures and Water Quality Actions
- Section 7 Predicted Effects of Habitat Conservation Measures and Water Quality Actions
- Section 8 Implementation Framework

In addition, the Appendices contain supporting materials that are referenced in the Plan.

Agency staff from Ecology, NMFS, and USFWS may find it useful to read this entire document. However, the following provides a "roadmap" of which sections directly pertain to the HCP and which pertain to water quality. This will be helpful for agency staff wanting to focus on sections directly relevant to specific programs.

Sections directly related to water quality:

Section 1	All except 1.2.2
Section 2	All except 2.1
Section 3	None
Section 4	4.5
Section 5	5.5
Section 6	All except 6.2 and 6.5
Section 7	All except 7.2
Section 8	All except 8.2
Sections directly related to HCP:	
Section 1	All except 1.2.3
Section 2	All sections
Section 3	All sections
Section 4	All except 4.5
Section 5	All except 5.5
Section 6	All except 6.3 and 6.4
Section 7	All except 7.3 and 7.4
Section 8	All sections

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