

CHAPTER 3

LEGISLATIVE RESPONSES

Various regulatory programs are in effect in Skagit County which affect both the need for flood protection works and the manner in which it may be carried out. Flood control works and protection is seen as a public benefit for the entire county. In general, Skagit County's regulatory programs take into account the benefit of flood control works and allow for them to be constructed, provided that they are well-designed, necessary, suitable, and potential impacts are mitigated. Other regulations control activities on the floodplain and shoreline so as to minimize flood damage potential.

Shoreline Management

The management of shorelines is regulated by the Skagit County Shoreline Management Master Program. The program was adopted by the County in June of 1976. The program is mandated by the State Shoreline Management Act (SMA, Chapter 90.58 RCW). The SMA is implemented by the local government under the oversight of the State Department of Ecology (WDOE).

The purposes of the program, as it relates to flood control practices, are as follows:

- To foster all reasonable and appropriate uses of the shorelines.
- To enhance public interest and allow limited reduction in public rights.

The natural character of the shorelines is to be preserved. State-wide interest is recognized over the local interest, as well as long-term over short-term benefit. Resources and ecology are to be protected while public access and recreational opportunities are also enhanced.

Shoreline definitions, area designations, and applicable management policy were developed for the county. Many of the general management policies potentially relate to flood control work. Some of the management policies include:

- New development should locate in under-utilized developed areas.

- Activities of low to medium intensity are preferred in the shorelines areas.
- Agricultural land is to be protected. Existing character and natural value of the shorelines should also be preserved.

The policy also states that all programs should be coordinated and monitored by applicable regulatory agencies, and should be in accordance with applicable comprehensive plans. Modifications and measures must be sited and designed by qualified personnel to comply with design standards.

Policies and regulations were more specifically developed for specific activities, including agriculture, dredging, forest management practices, landfills, recreation, and transportation facilities, as well as other items. The policies governing these activities are consistent with the general management policies. A sample of the policies pertaining to flood control work include:

- Dredging should not affect natural drainage, currents flows, or water quality.
- Forest practices are encouraged so long as they meet or exceed policies set forth in the Forest Practices Act.
- Landfills and transportation facilities as part of industrial development should be planned to minimize effects to drainage and floodwater.
- Recreational structures should be located out of the floodway to minimize the need for protective work.

A separate section (Chapter 7.16) is devoted to policies and regulations exclusively regarding shoreline stabilization and flood protection. General highlights of the section include:

- Programs must be coordinated and monitored to provide for comprehensive planning.
- Modifications and flood protection measures should be sited and designed by qualified personnel to comply with design standards.

Section 7.16 also provides policies and regulations governing design, location, materials, natural features, agricultural practices, and alternatives and impacts for stabilization and flood protection. Appendix B includes the section in its entirety. Some important policies listed include:

- Riprap and bank stabilization should be constructed to prevent damage to agricultural land, public roads, existing structures or natural features of public interest, not restricting the flow of the river.
- Projects should be located landward of natural wetlands, marshes, and swamps.
- No intensive land uses should be allowed within paths of meandering channels.
- Realignment and channel modifications are discouraged.
- Natural features should remain that do not intrude on channels, reduce flow capacity, or threaten structures.
- All works must allow passage of surface and ground water.
- A shoreline permit as required by RCW 90.58.140(1) is needed before commencement of stabilization or flood protection measures.

Drainage

Skagit County adopted its Water Drainage and Erosion/Sedimentation Control Ordinance (Skagit Ordinance No. 9763, Chapter 14.36) in 1983 which potentially applies to flood control works. The purpose of the ordinance is to "promote sound development policies and construction procedures which respect and preserve the County's water courses; to minimize water quality degradation by controlling the sedimentation of drainage ditches, creeks, rivers, ponds, lakes, and other water bodies; to protect property owners adjacent to developing land from increased runoff rates which may cause erosion of abutting properties; to preserve and enhance the suitability of waters for active and passive recreation and sport and commercial fishing; to protect valuable ground water resources; to protect downstream property owners; to ensure the safety of County roads and rights-of-way; and to decrease surface water damage to public and private property." The ordinance requires a drainage plan for most property improvements that require a permit.

The ordinance has a supporting document, Procedure Manual for Drainage/Erosion/Sedimentation Control, which was also adopted in 1983. The manual contains design standards and other requirements for setbacks, discharge limits, detention, and erosion and sedimentation control.

Land Use and Zoning

Skagit County adopted the Zoning Ordinance (Chapter 14.04 Skagit County Code) in 1985. The purpose of the ordinance is to

assist in orderly development, conserve the value of property, and safeguard the public welfare by means of a comprehensive land use plan which is, in part, carried out by the provisions of the ordinance. It is further intended to provide regulations and standards which will:

1. Encourage the most suitable and compatible uses of land.
2. Provide residents adequate light, air, access, privacy, and safety from fire and other hazards.
3. Allocate sufficient lands for all required uses while conserving the County's agricultural and natural resources.

The ordinance protects the agricultural land uses and limits commercial and industrial uses to specified areas, mostly outside the floodplain. Current land use maps are included in Appendix C.

The ordinance has one provision which directly relates to flood control work. Section 19(12) requires that all structures have a minimum 50 feet landward setback from the toes of dikes and levees. The same section also lists additional requirements for owners in Skagit Beach Plats 1 through 5 in the East Swinomish Channel.

Resource Management

Resource management regulations are intended and designed to protect public resources such as water, fish, and wildlife, while allowing reasonable exercise of private property rights. Because structural flood protection measures are usually carried out within the stream or nearby in the shoreline zone, they have the potential to damage public resources.

Wild and Scenic Rivers Act. Section 703 of Public Law 95-625 (November 10, 1972) amended Section 3a of the Wild and Scenic Rivers Act to designate selected segments of the Skagit, Cascade, Sauk, and Suiattle Rivers for inclusion in the Wild and Scenic River System. The Act sets limitations on the degree and amount of construction and modifications that can be done to the river system. This legislation effectively precludes upstream storage on these river segments.

Forest Practices Act. The timber industry is a major economic entity in Skagit County. It also has an effect on flood problems, as forest practices can aggravate runoff through increased sedimentation, debris, volume, and velocity. The Forest Practices Act (Chapter 76.09 RCW) and the Forest Practices Board (Title 22 WAC) regulate the management of the resources, and the State enforces the regulations. The Act has mitigating measures to protect stream erosion.

Hydraulic Project Approval. The Hydraulic Project Approval (HPA) is issued by the State Department of Fisheries or Wildlife under the authority of the Washington Hydraulic Code (RCW 75.20.100) which requires the departments to regulate activities within the marine and fresh waters of the state. The Department of Fisheries exercises jurisdiction over marine waters. The two agencies share jurisdiction over fresh waters, though one agency will assume lead status over a specific fresh water body. The Department of Fisheries exercises jurisdiction over the Skagit River. Regulation is implemented in accordance with Hydraulic Code Rules (Chapter 220-110 WAC).

Therefore, any shore protection works such as dikes constructed waterward of the line of ordinary high water or instream work such as gravel removal conducted in Skagit County require an HPA.

The primary function of the Hydraulic Code is to protect the state's fisheries resources, including spawning and rearing habitat. Thus, the rules for gravel removal (WAC 220-110-140) limit the removal to gravel two feet above the current water level, prohibit the leaving of potholes, and require a maximum gradient on the excavated surface of two percent. The rules for bank protection work (WAC 20-110-050) limit such construction to stream banks actually damaged.

An HPA is required for both new construction and repair of old or damaged bank protection works. An approved HPA will ordinarily carry strict limitations on the time of year during which construction activities may be carried out. This is necessary to protect certain fish populations during critical phases of their life cycle.

HPAs for the Skagit River are administered by:

Habitat Management Section
Washington Department of Fisheries
3939 Cleveland Avenue
Tumwater, Washington 98504

Department of the Army Permit. The U.S. Army Corps of Engineers (the Corps) is required to regulate discharges of dredged and fill material into waters of the United States and associated wetlands under Section 404 of the Clean Water Act. This regulatory charge includes shore protection structures and any associated earthmoving and landfilling. The Corps is also required to regulate any construction within navigable waters under Section 10 of the Rivers and Harbors Act of 1899. The Corps has developed a consolidated permit application and review program for their responsibility under both laws, known as the Department of the Army Permit. Therefore, any shore protection structures constructed waterward of the line of ordinary high water (or within

an associated wetland) will require a Department of the Army Permit.

Certain minor shore protection projects may come under the Corps' nationwide permit program, for which no formal permit application is required. However, notification of the Corps is required for certification of exemption from full permit application and processing requirements. Minor shore protection works eligible for the nationwide permit program are still required to meet certain minimal design and construction specifications. An exemption to the requirement for a full permit application and processing under the nationwide permit program may be obtained if the proposed shore protection work complies with the following criteria (33 CFR 330.5 [a] [13]):

1. The proposed shore protection is less than 500 feet in length;
2. the project is necessary for erosion protection;
3. the filling within waters of the United States is limited to less than one cubic yard per running foot of shore protection;
4. no material is placed in excess of the need for shore protection;
5. no material is placed in a wetland;
6. no material is placed so as to impair surface water flow into or out of a wetland;
7. only clean fill free of waste metal products, organic materials, unsightly debris, etc., is used; and
8. the proposal is for a single, complete project.

The Department of the Army Permit program is administered by:

Regulatory Functions Branch
Seattle District
U.S. Army Corps of Engineers
P.O. Box C-3755
Seattle, Washington 98124

Water Quality Certification. The Washington Department of Ecology administers the state Water Pollution Control Act (Chapter 90.48 RCW) in accordance with the Water Quality Standards for Waters of the State of Washington (Chapter 173-201 WAC).

Stream bank protection and instream gravel removal has the potential to create temporary instream turbidity in excess of

state water quality standards during the construction period. The Water Quality Standards provide for short-term modifications of the standards "when necessary to accommodate essential activities, respond to emergencies, or to otherwise protect the public interest" (WAC 173-201-035 [8] [e]).

Stream bank protection and instream gravel removal projects require a Water Quality Certification including a short-term modification of pertinent water quality standards. Each such certification is reviewed and issued on an individual basis as an administrative order, and includes specific limitations on how and when construction activities may be carried out. For projects which also require a Department of the Army Permit, application for a Water Quality Certification should be made to:

Environmental Quality Section
Northwest Regional Office
Washington Department of Ecology
7272 Cleanwater Lane
Olympia, Washington 98504

For projects not requiring a Department of the Army Permit, application for a Water Quality Certification should be made to:

Environmental Review Section
Washington Department of Ecology
Olympia, Washington 98504

Flood Control and Floodplain Management

A number of programs relate to flood control or floodplain management. Some are intended to regulate certain activities (e.g., land use) to limit the effects of flooding. Others are non-regulatory programs intended to coordinate and finance public flood control measures.

National Flood Insurance Program (NFIP). The NFIP is described in detail in a publication available from the Shorelands and Coastal Zone Management Program of the WDOE (Floodplain Management Handbook for Local Administrators; Floodplain Management Section, 1986). The following is a summary of the program.

The NFIP was established in 1968 to make flood insurance available for residential and non-residential structures. The NFIP has two central purposes. First, by making flood insurance available, Congress felt that it could alleviate the financial burden and general economic distress resulting from both chronic and disastrous flooding. Second, Congress also had the goal of mitigating floodplain actions which would cause a financial drain on the national treasury. The basis of operation of the NFIP is an agreement between the County and the Federal Emergency

Management Agency (FEMA), the federal agency which administers the program. After FEMA confirms the County as "flood prone" the County becomes eligible to have flood insurance coverage made available. The County must adopt and enforce floodplain management regulations in accordance with the minimum criteria of FEMA.

In 1984, FEMA completed a flood insurance study for unincorporated Skagit County, as well as for Concrete, Hamilton, LaConner, Lyman, Anacortes, Burlington, Mount Vernon, and Sedro Woolley. The 100-year floodplain for the entire watershed within the County was determined through hydraulic and hydrologic analyses performed by the Corps of Engineers and Dames and Moore for FEMA. Flood insurance rate maps were developed for the flood-prone areas determined in the study. The 100-year floodplain is the boundary of the designated flood-prone areas. The area map presented in Figure 3-1 shows the location of the 100-year floodplain.

Floodplain Management Regulations. Skagit County adopted floodplain management regulations in April 1987 in accordance with the minimum FEMA requirements, in order to remain eligible for the NFIP.

Ordinance No. 11216 modified the existing Title 15, Chapter 15.20 Skagit County Flood Damage Prevention Ordinance to incorporate the new federal regulations for the NFIP that went into effect October 1986. The general purpose of the ordinance is to minimize public and private losses due to flood conditions in specified areas. This ordinance has the effect of being a building code for floodplain construction. In order to accomplish this purpose, the ordinance includes methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities.
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters.
4. Controlling filling, grading, dredging, and other development which may increase flood damage.
5. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

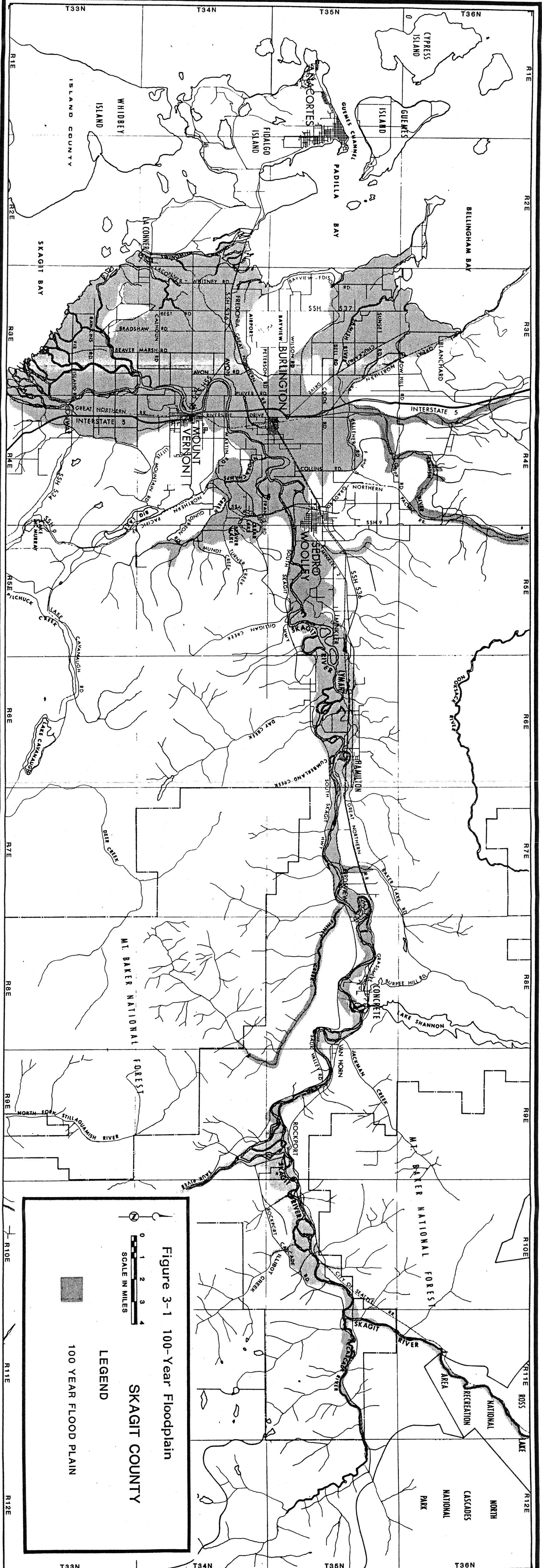
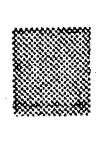


Figure 3-1 100-Year Floodplain

SKAGIT COUNTY

LEGEND

100 YEAR FLOOD PLAIN



100 YEAR FLOOD PLAIN

T33N

T34N

T36N

T36N

R10E

R11E

R12E

R10E

R11E

R12E

T33N

T34N

T36N

T36N

R1E

R1E

R2E

R2E

R3E

R3E

R4E

R4E

R5E

R5E

R6E

R6E

R7E

R7E

R8E

R8E

R9E

R9E

R10E

R10E

R11E

R11E

R12E

R12E

Standards are specified that help to minimize flood damages. Anchoring of buildings in the floodway is required, as well as flood-proofing. The first floor is required to be one foot above the base flood elevation, and all utilities are to be flood-resistant. Other specifications are also listed in the ordinance.

Flood Plain Management. The Flood Control Zone Act was first enacted by the state legislature in 1935 for the "alleviation of recurring flood damages to public and private property, to the public health and safety, and to the development of the natural resources of the state . . ." (RCW 86.16.010). The Act originally specified state regulatory authority over designated flood control zones, including the authority to regulate construction and planning within floodplains and floodways (RCW 86.16.020, 025).

Skagit County has eight subflood control zones which are affected by the changes in the Act. The locations of these control zones are shown in Figure 3-2.

In June 1987, the legislature retitled Chapter 86.16 RCW to Flood Plain Management and enacted substantial changes to the Act (ESB 5556). The revised act shifted basic regulatory authority from the state to local government, eliminated the state designated flood control zones, and extended authority of the Act to the entire state, not just the designated flood control zones. The state retained oversight authority over the actions of local governments in implementing the new Act. The DOE provides technical assistance to local governments, and must approve locally prepared floodplain management programs. New rules for implementation of the Act (WAC 173-158, Flood Plain Management) have been developed by WDOE and were adopted May 3, 1988.

Diking and Drainage Districts. Title 85 RCW authorized the formation of diking and drainage districts. These districts are given responsibility over dikes and drainage systems, may petition the County for funding and assistance, and can assess those within the district that are receiving benefits. Local control of diking and drainage is maintained, yet proper permit application and review procedures are required to prevent piecemeal flood control projects that might be inconsistent with resource management regulatory programs. Skagit County presently has 25 diking and drainage districts, as shown in Figure 3-3.

Coordination

There are no institutionalized programs for comprehensive coordination of land use and flood control regulations or permit processing at either the state or local government level. Informal coordination occurs between the state DOE and Department of Fisheries regarding comprehensive flood control management planning.

Four permits are potentially necessary to carry out structural flood control work:

1. A federal Department of the Army Permit, a consolidation of the Section 10, Rivers and Harbors Act, and Section 404, Clean Water Act permits, is necessary for work carried out in navigable waters, waters of the United States, and adjacent wetlands.
2. A state HPA is necessary from the state Department of Fisheries for work in or near fish-bearing waters.
3. A local Shoreline Substantial Development Permit, under the state Shoreline Management Act, is necessary for work in and within the wetlands adjacent to streams with an average annual flow of 20 cfs or greater.
4. A local permit is necessary for construction within the 100-year floodplain.

The state's Environmental Coordination Procedures Act (ECPA) process is voluntarily available to permit applicants through the DOE's Environmental Review Program for coordination of state permits, but this does not include coordination of federal permits. Coordination is considered necessary to avoid contradictory conditions of permit approval by different agencies with different regulatory mandates.

Interagency Stream Corridor Management Guidelines were promulgated in 1985 as an interagency memorandum of understanding (MOU) between the Washington Departments of Game, Fisheries, and Ecology, the Washington Conservation Commission, and the U.S. Soil Conservation Service. The guidelines establish a procedure for interagency cooperation and coordination in the planning, design, and implementation of structural and non-structural works and activities within stream corridors, including permit review. The contact persons under the MOU for the Skagit River basin are:

Department of Fisheries

Regional Habitat Manager
Habitat Management Section
Washington Department of Fisheries
3939 Cleveland Avenue
Tumwater, Washington 98504

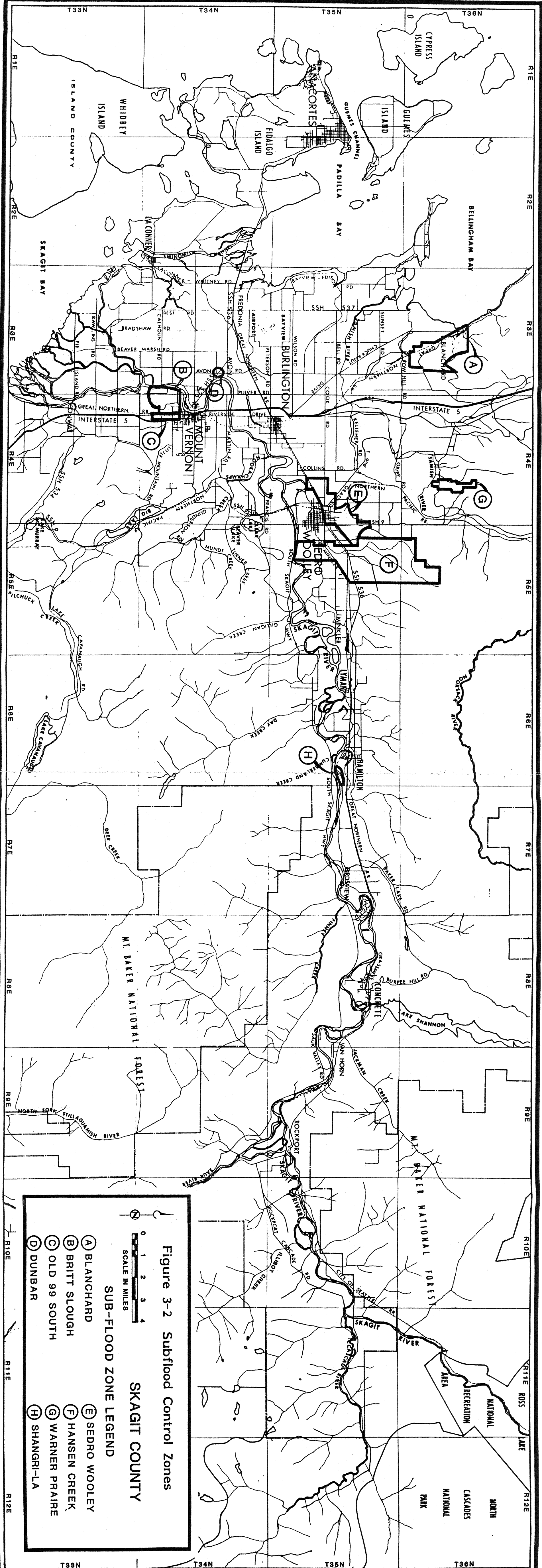


Figure 3-2 Subflood Control Zones

0 1 2 3 4
SCALE IN MILES

SKAGIT COUNTY
SUB-FLOOD ZONE LEGEND

- A) BLANCHARD
- B) BRITT SLOUGH
- C) OLD 99 SOUTH
- D) DUNBAR
- E) SEDRO WOOLEY
- F) HANSEN CREEK
- G) WARNER PRAIRE
- H) SHANGRI-LA

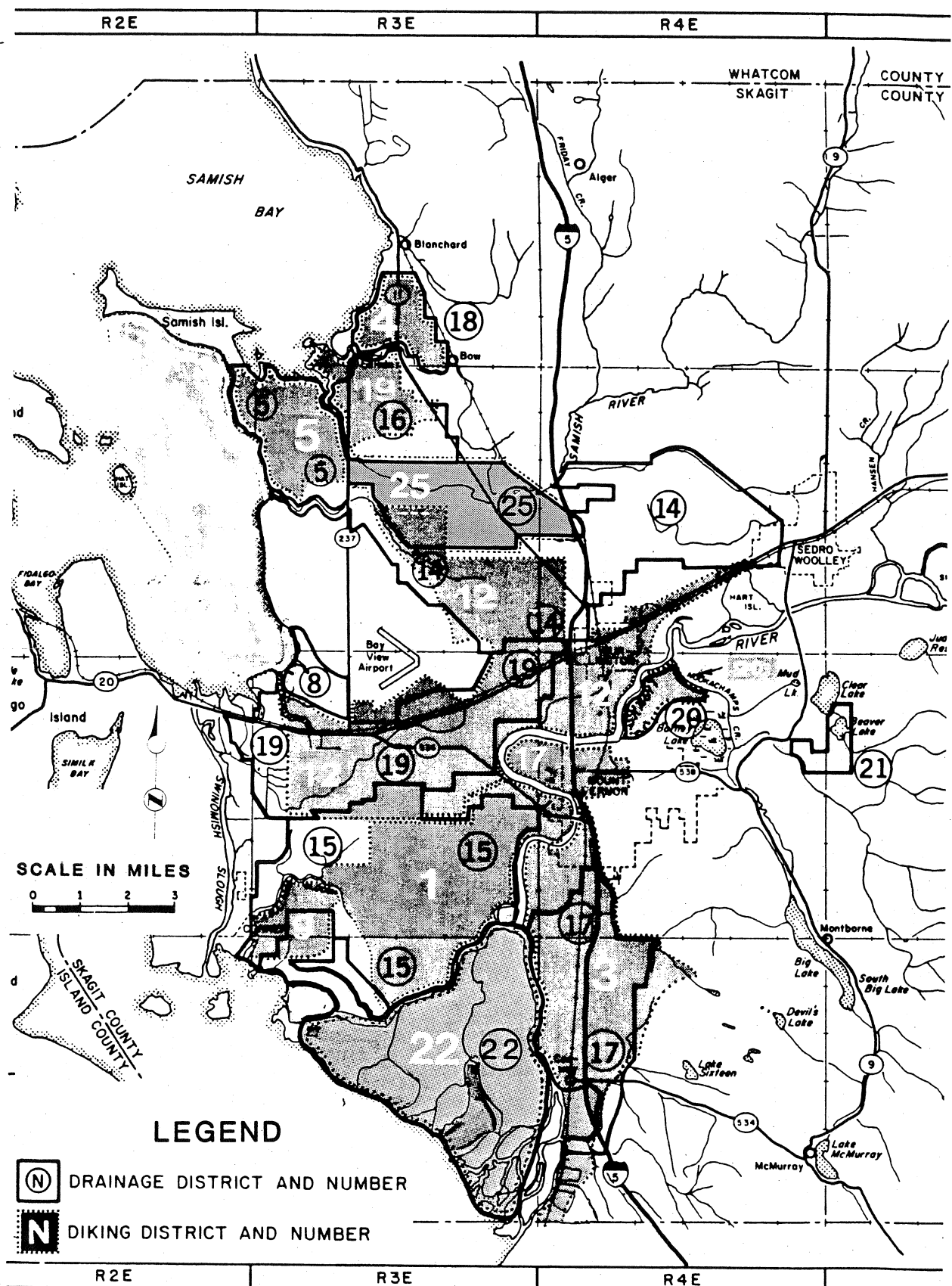


Figure 3-3 Drainage and Diking Districts

Department of Ecology

Water Quality

Northwest Regional Office
Washington Department of Ecology
7272 Cleanwater Lane
Olympia, Washington 98504

Shoreline Management

Management Section
Shorelands and Coastal Zone Management Program
Washington Department of Ecology
Olympia, Washington 98504

Skagit County Conservation District:

District Conservationist
Skagit County Conservation District
816 East Fifth Street
Olympia, Washington 98501

U.S. Soil Conservation Service

Olympia Field Office
816 East Fifth Street
Olympia, Washington 98501

CONSTRAINTS ON INSTREAM FLOOD CONTROL

Flood control is seen as a public benefit by Skagit County. Most flood control work is permitted on a conditional use. The regulations as set forth above recognize the need for flood control work and provide the ways and means for these to be accomplished for maximum public benefit.

Some types of instream flood control work are inconsistent with regulations within the County. Legal, financial, public policy, social, economic, and environmental factors and conditions can impose constraints and limitations on the planning process. Possible constraints that were identified are listed below.

- The financial capabilities of Skagit County to fulfill the local cooperation requirements for flood control could constrain the scope of projects considered.

- Congressional passage in October 1978 of the Wild and Scenic Rivers legislation, which included large segments of the Skagit, Sauk, Cascade, and Suiattle Rivers in the national system, effectively precluded upstream storage on those river segments and thereby limited the flood control measures available for selection.
- Channel modifications are avoided to preserve natural functioning of the river. The Avon bypass project proposed by the Corps of Engineers in 1963 was never approved, due in part to such reasoning.
- The presence of important anadromous fishery resources in the Skagit River and significant wildlife resources in the Skagit River system, including waterfowl, shorebirds, and raptors, imposes some constraint on the types of solutions that could be considered to address the flood damage reduction objective and on specific design details.
- The large existing economic investment in the floodplain, including residential and commercial developments, and the high existing flood damage associated with these developments, could constrain the types of alternative solutions that could be economically or socially acceptable. This constraint could particularly affect the viability of some purely non-structural solutions such as permanent floodplain evacuation.
- Executive Order 11988 on floodplain management required federal agencies to provide leadership and take action to reduce the hazards and risk of flood loss; minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural beneficial floodplain values. The Executive Order constrains unnecessary development of floodplains and provides objectives to guide necessary floodplain development. It requires an analysis of possible non-structural measures which could be used instead of the traditional structural solutions.
- Executive Order 11990 on the protection and preservation of wetlands instructs all federal agencies to develop priorities and guidelines to protect wetland areas.
- The desires of the local sponsor and the communities along the Skagit River formed a constraint on the project design and the scope of improvements.