

SKAGIT COUNTY DIKE DISTRICT #1

Dike District Profile

| | |
|--|---------------|
| Land Area Owned | 16 acres |
| Miles of Dike/Levee: | 9 miles |
| Value of Dike/Levee: @ \$3,000 / ft 2008 USACE | \$142,560,000 |
| Number of Pumps: | 0 |
| Value of Pumps: | 0 |
| Number of Tide gates: | 0 |
| Value of Tide gates: | 0 |
| Value of Equipment Owned: | \$135,000 |
| Value of Area Served: | \$277,628,100 |

Critical Facilities (Owned by District)

1. Dike District Building approx. value: \$145,000

Outline of Area Served

Beginning at the intersection of the County Road, or present dike, with E point of what is known as Pleasant Ridge, in Section 10, Township 33 N, R 3 E.W.M.; thence S to the North Fork of the Skagit River, thence NE along the river bank, to the intersection with Skagit River; thence NE, N and NW along the W bank of Skagit River to what is known as Wiles Slough in Section 13, Township 34 N, R 3 E.W.M.; thence SW along said slough to its intersection with the W line of the SE 1/4 of Section 14, thence S to the center of Section 23, thence W and SW along the County Road to the W line of the SE 1/4 of Section 21, thence S to the center of Section 28, thence W 1/2 mile, thence S to the intersection of a dike on the N bank of what is commonly known as Wallace Slough, thence SW, along the outer line of said dike, to the dike dividing what has heretofore been known as dike districts No.s 1 and 9, thence SE along the center of the last mentioned dike to the intersection with the N point of the aforesaid Pleasant Ridge in Section 32, Township 34 N, R 3 E.W.M., thence along the County Road in a SE direction to the place of beginning. (Res., 19)

Current and Anticipated Service Trends

- Improving levees through potential relocation which would involve land acquisition, construction of keyways, sheet piling, seepage berms and routine maintenance.
- Development of evacuation plan and emergency warning system for protection of life and property.
- Flood fighting equipment upgrades which would include 45kw commercial generator

Natural Hazard Event History (1975 to Present)

| | | |
|---|----------|------------------|
| 1. High River Flood Stage; 129,000 c.f.s. | 12/04/75 | Damage Unknown |
| 2. High River Flood Stage; 142,000 c.f.s. | 11/11/90 | see figure below |
| 3. High River Flood Stage; 152,000 c.f.s. | 11/25/90 | \$2,000,000 |
| 4. High River Flood Stage; 151,000 c.f.s. | 11/30/95 | \$2,500,000 |
| 5. High River Flood Stage; 135,000 c.f.s. | 10/22/03 | \$ 803,853 |
| 6. High River Flood Stage; 138,000 c.f.s. | 11/07/06 | \$3,105,000 |

Natural Hazard Vulnerability Analysis Rating

The District is most vulnerable to the following natural hazards – ranked in order:

1. Flooding
2. Volcano (causing flooding)
3. Earthquake (rupturing dams and levees)

Existing Applicable Natural Hazard Mitigation Policies, Ordinances and Codes

1. All levees are constructed to Army Corps of Engineers standards and are inspected on an annual basis.
2. County, State and Federal permits are required for all construction and repair work.
3. RCW 85
4. Skagit County Comp Flood Haz Management Plan 1989
5. COE PL8499
6. 500-1-1

Proposed Natural Hazard Mitigation Measures (2003 -2008)

| Mitigation Measure | Lead Agency | Funding Source | Time Line |
|---------------------------|---------------|----------------|------------|
| Sheet piling installation | Commissioners | Grant funding | Short Term |
| Keyway installation | Commissioners | Grant funding | Short Term |
| Seepage berm installation | Commissioners | Grant funding | Ongoing |

Mitigation Accomplishments (2003 – 2008)

During the 2003 – 2008 plan cycle, Dike District #1 completed the installation of a seepage berm from the south end of the Kamb Road downstream to the east end of the Marsh Road. No sheet piling or keyways were installed during the 2003 – 2008 plan cycle.

Proposed Natural Hazard Mitigation Measures (2008 – 2013)

| Mitigation Measure | Lead Agency | Funding Source | Time Line |
|---------------------------|---------------|----------------|------------|
| Sheet piling installation | Commissioners | Grant funding | Short Term |
| Keyway installation | Commissioners | Grant funding | Short Term |

The mitigation measures listed above remain valid and are re-affirmed for the 2008 – 2013 plan cycle.

Existing Applicable Hazard Mitigation Associated Plans and/or Documents

1. Agreement with Rexville Grange for elevated evacuation site located on Pleasant Ridge.
2. Agreement with Red Cross for assistance
3. Existing construction for strengthening of levee
4. Skagit County Comp Flood Hazard Management plan 1989
5. 2003 Hazard Mitigation Plan

Additional Concerns Affecting Dike District #1

With the potential 3 Bridge Corridor Project and levee setback proposed by the upriver Dike District and Skagit County, the additional conveyance of water coming downstream would create a “bottleneck” with possible loss of the Westside Bridge with flood waters exceeding 160,000 cubic feet per second. Upgrading and raising the Westside Bridge approaches would be a necessity, as well as setting levees back in West Mount Vernon and in other areas within the District downstream of this proposed project. Wing dikes were built in 2002 to help protect the west bridge approach.