

1 Sponsored by: Councilmember Joyce McDonald

2 Requested by: Pierce County Council

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6 ORDINANCE NO. 2011-95s
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10 **An Ordinance of the Pierce County Council Relating to Protecting Lives**
11 **and Property by Controlling Flooding in Pierce County;**
12 **Adopting Findings of Fact; Ordering the Formation of a**
13 **Countywide Flood Control Zone District; Describing the**
14 **Boundary of Pierce County and the Countywide Flood**
15 **Control Zone District; Adopting a New Chapter 11.06 of the**
16 **Pierce County Code, "Pierce County Flood Control Zone**
17 **District"; Repealing Resolution Nos. 10831, 17086, and**
18 **17471; and Setting an Effective Date.**
19

20 **Whereas**, the current level of funding for acquisition, construction, maintenance
21 and operation of flood control improvements in Pierce County is not adequate to meet
22 current and future needs to protect private and public property from damage caused by
23 flooding; and
24

25 **Whereas**, Pierce County's economic vitality and the safety of its citizens depends
26 on a well maintained and well functioning flood control system; and
27

28 **Whereas**, it is in the best interest of Pierce County citizens to enjoy the benefits
29 of a flood control zone district; **Now Therefore**,

30
31 **BE IT ORDAINED by the Council of Pierce County:**
32

33 Section 1. The Pierce County Council hereby adopts the following Findings of
34 Fact:
35

- 36 A. One of the important functions of government is to protect citizens and public
37 and private property from the ravages of natural disasters such as flooding.
38
39 B. Flood control needs exist throughout the County, and an integrated and
40 coordinated approach is needed to effectively and efficiently address those
41 needs to ensure that public safety and property are protected and our region's
42 prosperity is sustained.
43
44 C. Every year, Pierce County faces significant threats from flooding, the impacts of
45 which are far-reaching and pose threats to public health and safety and
46 economic activities throughout the County.
47

- 1 D. Between 2006 and 2009, Pierce County experienced 3 of the 15 largest flood
2 events of recorded history, dating back to the early 1900s. These events,
3 combined with the flood of record in February 1996, revealed numerous
4 deficiencies in the County's aging flood protection system. In November 2006,
5 record rainfall on Mt. Rainier (up to 18 inches in 36 hours) caused river flooding
6 throughout Pierce County, resulting in millions of dollars in property damage,
7 including additional damage to Pierce County's flood protection facilities and the
8 closure of Mt. Rainier National Park due to damage caused by the Nisqually
9 River. Additional flood events in December 2008 and January 2009 caused
10 more flooding to the region, causing millions more in property damage.
11 Following the 2009 flooding, Pierce County was declared a federal flood disaster
12 area for the eighth time since 1990.
13
- 14 E. Throughout Pierce County there is approximately 92 miles of aging flood
15 protection facilities that cannot be adequately repaired or maintained because of
16 revenue limitations. Investigations following the 2008 and 2009 flood disasters
17 determined that there were 49 locations along the flood protection facilities on
18 the Puyallup, Carbon, White, and Nisqually Rivers that sustained damage. In
19 addition, there are additional needs for new or enhanced flood protection
20 facilities, setback levees and other measures throughout the County.
21
- 22 F. The 100-year floodplain in Pierce County covers more than 40,000 acres or over
23 60 square miles, based on the flood insurance rate maps produced by FEMA.
24 The estimated value for the property exposed to flooding within unincorporated
25 Pierce County represents approximately 11.6 percent of the total assessed
26 property values for the unincorporated county.
27
- 28 G. Many industrial and commercial facilities and residential and agricultural areas
29 in the Lower Puyallup, Lower White, Middle Puyallup, and Carbon River areas
30 are protected by aging levees, some of which were damaged by flooding in the
31 last three years. Further damage to these facilities and areas from flooding or
32 the failure to repair the damage that has already occurred could have far-
33 reaching economic impacts throughout the region.
34
- 35 H. The impacts of flooding can be severe and extend far beyond the floodplain
36 itself. Buildings can be reduced to rubble along with household furnishings and
37 business inventories. In addition to the direct threats and damage from
38 floodwater, people face the threat of electrocution, explosions and fires caused
39 by leaking gas lines and damaged electrical lines. Severe flooding can also
40 destroy utility infrastructure, causing extensive disruptions in service. The loss
41 of power and communication is common with severe floods. Damage to
42 drinking water and wastewater facilities can spread disease. In addition,
43 impacts to roads and highways can impair the mobility of people, goods and
44 services, including emergency vehicles and personnel.
45
46

1 I. Countywide economic and environmental consequences would occur if three
2 wastewater treatment plants located in the flood plain are damaged or
3 compromised by flooding. These plants serve the cities of Tacoma, Puyallup,
4 Sumner and Bonney Lake. If flooding overwhelms these plants, it is likely that
5 raw sewage would mix with flood waters causing fecal material to degrade water
6 quality and pose risks to the water quality of Puget Sound as well as nearby
7 property owners.
8

9 J. According to the US Environmental Protection Agency, contact with raw sewage
10 exposes people to a variety of pathogenic micro-organisms, viruses, and
11 intestinal worms that can cause serious illnesses such as cholera, dysentery,
12 infectious hepatitis, and gastroenteritis. Sensitive populations – children, the
13 elderly, and those with weakened immune systems – are at a higher risk of
14 illness. Sewage can cause the explosion of algal growth, depleting oxygen in
15 the water and killing fish. Raw sewage discharges cause property damage and
16 public health problems when overflows flood homes and businesses that
17 subsequently require cleanup, large-scale disinfection, and replacement of rugs,
18 furniture, wallboard panels, and flooring.
19

20 K. Portions of Interstate 5 (I-5) are protected by aging levies and in 2009 the
21 floodwaters behind the levies protecting I-5 came within inches of causing
22 closure of the interstate. County residents rely on I- 5 for access to their jobs
23 and for transport of freight that supplies goods to business, stores, and
24 households. The economic consequences of I-5 flooding closures are
25 significant. The state-wide freight-related economic impact from the 2007
26 flooding closure of I-5 near Chehalis resulted in lost economic output of \$47.07
27 million; employment loss of 290 jobs; state tax revenue loss of \$2.39 million, and
28 reduction in personal income of \$14.55 million. (Washington State Department
29 of Transportation Final Research Report related to storm closures of I-5 from
30 December 3-7, 2007.)
31

32 L. The Pierce County Council considered the Rivers Flood Hazard Plan Economic
33 Analysis Final Report, Pierce County Public Works and Utilities Surface Water
34 Management Division as prepared by Entrix, Inc. (October, 2010). The analysis
35 found that potential flood related losses in Pierce County are in excess of \$725
36 million. This report found that the potential direct and indirect flood-related
37 impacts and associated economic losses are as summarized below:
38

39 Health and Safety – Potential direct impacts to:

- 40 1. 21,193 individuals living in the floodplain;
- 41 2. 9,340 homes located in the floodplain;
- 42 3. three wastewater treatment plants located within the floodplain which if
43 flooded could:
 - 44 a. Spill raw or partially treated sewage into floodwater;
 - 45 b. Require two weeks to six months to return to full secondary treatment
46 and disinfection;

- c. Disrupt businesses and homes served in the cities of Puyallup (37,000 people served), Tacoma (154,000 people served), Sumner and Bonney Lake (25,000 people served); and
- d. Result in repair costs of between \$3 and \$120 million, depending on the plant and severity of flooding.

Pierce County Economy:

- 1. 11,868 jobs at businesses located within the 100-year floodplain;
- 2. Estimated range lost economic output – \$12.6 to \$46.2 million;
- 3. Estimated range of personal property losses – \$199.1 to \$520.8 million;
 - a. Compromises the ability of the Port of Tacoma to compete for discretionary cargo if the Port's clientele is concerned about delays in the transportation chain due to flooding.

Transportation Impacts of a 100-year Event:

- 1. Road and rail closures including portions of: Interstate 5, SR509, SR410, Pacific Hwy. Amtrak, BNSF and UP railways;
- 2. Traffic Disruptions, e.g., Interstate-5 traffic flow: 1.5 million vehicles daily in a four-county region;
- 3. Estimated range of economic impacts from traffic delays (commuter, freight on trucks and rail) – \$12.6 to \$19.3 million;
- 4. Disruptions in freight traffic, specifically Port operations, impact to both the local economy and as far away as Alaska and the Pacific Rim;
- 5. Port of Tacoma's trade volume – \$98.6 million daily average.

Recreation, Mt Rainier and Crystal Mountain:

- 1. Mt Rainier National Park closure due to channel migration for 2 to 6 months;
- 2. Economic impact of closing Mt. Rainer – \$0.5 to \$9.6million total output;
- 3. Jobs impacted by closing Mt Rainer – 70 to 550 jobs;
- 4. Crystal Mountain daily closures – \$0.1million average daily output.

M. Major job generating businesses such as the Port of Tacoma whose activities generate more than 43,000 jobs in Pierce County are located in areas that are protected by aging levies, many of which were damaged by recent flooding. Further damage to those facilities from flooding or the failure to repair damage that has already occurred could have far-reaching economic impacts throughout the region. (Economic Impact of the Port of Tacoma, Martin Associates, May 24, 2005)

N. Through Ordinance No. 2011-8 Pierce County repealed Ordinance No. 2010-16s that created a prior flood control zone district. Following a ruling from the Boundary Review Board that was favorable to the County, some cities in Pierce County appealed the Board ruling. The County repealed this Ordinance to demonstrate a commitment to a more inclusive and deliberative formation process.

- 1 O. Ordinance No. 2011-8 requested the County Executive to complete a State
2 Environmental Policy Act (SEPA) review of a flood control zone district
3 encompassing the entire county. The County issued a determination of non-
4 significance on October 19, 2011, following preparation and circulation of an
5 environmental checklist, agency review, and a public comment period.
6
- 7 P. Pierce County undertook extensive public involvement to engage
8 representatives of Pierce County cities in the formation process for a flood
9 control zone district. This process included briefings for mayors and invitations
10 to meet with city councils.
11
- 12 Q. Pierce County is committed to implementing a cost efficient model to implement
13 and administer a flood control zone district. It is anticipated that the County and
14 the Flood Control Zone District will enter into an interlocal agreement that
15 identifies roles and responsibilities of both in order to maximize use of existing
16 County staff and agencies so that maximum funding is applied to project
17 maintenance and construction.
18
- 19 R. Chapter 86.15 of Revised Code of Washington (RCW) authorizes the Pierce
20 County Council to initiate the formation of a countywide flood control zone
21 district within Pierce County for the purpose of undertaking, operating, or
22 maintaining flood control projects or storm water control projects, among other
23 powers. A countywide district is authorized to address flood and storm water
24 control needs throughout the County, including within Pierce County cities.
25
- 26 S. RCW 86.15.070 authorizes the Pierce County Council to appoint a countywide
27 advisory committee of 15 members or less. A countywide advisory committee
28 can provide the board of supervisors with important input on flood and
29 stormwater control needs and priorities throughout Pierce County to ensure that
30 flood and stormwater projects and programs are implemented efficiently and
31 effectively.
32
- 33 T. RCW 86.15.140 requires the flood control zone district supervisors to annually
34 adopt a budget for the district, but only after a public hearing, notice of which
35 shall be given as provided by RCW 36.32.120(7).
36
- 37 U. The Council considered the testimony of Harold Smelt, Pierce County Surface
38 Water Management Utility Manager, before the Pierce County Boundary Review
39 Board in Case No. 1-10-1 relating to the formation of the proposed countywide
40 Flood Control Zone District.
41
- 42 V. The Council considered the exhibits provided to the Pierce County Boundary
43 Review Board and exhibits to Pierce County's Brief filed in Pierce County
44 Boundary Review Board Case No. 1-10-1 relating to the formation of the
45 proposed countywide Flood Control Zone District.
46

1 W. The Council considered the final decision of the Pierce County Boundary
2 Review Board in Case No. 1-10-1 relating to the formation of the proposed
3 countywide Flood Control Zone District.
4

5 X. The maintenance and operation of flood control improvements located within the
6 District is determined to benefit the whole of the District and the County.
7

8 Y. There are no flood control zone districts in Pierce County. The history of
9 Council action creating, dissolving or contemplating flood control zone districts is
10 as follows:
11

12 1. Resolution No. 10831, approved by the Board of Pierce County
13 Commissioners on September 27, 1965, sought federal assistance in
14 planning, financing and construction of necessary flood control and drainage
15 works under the provisions of the Watershed Protection and Flood
16 Prevention Act. Recitals to the resolution indicate it was adopted as a
17 response to interest from the cities of Algona and Pacific seeking creation of
18 a flood control zone district.
19

20 2. Resolution No. 17033, approved by the Board of Pierce County
21 Commissioners on March 19, 1974, initiated the creation of the Hylebos
22 Flood Control Zone District.
23

24 3. Resolution No. 17086, approved by the Board of Pierce County
25 Commissioners on April 15, 1974, created the Hylebos Flood Control Zone
26 District.
27

28 4. Ordinance No. 2006-113, approved by the Pierce County Council on
29 November 14, 2006, dissolved the Hylebos Flood Control Zone District.
30

31 Z. On _____, the Council adopted an Ordinance initiating the
32 formation of a countywide flood control zone district and setting a public hearing
33 on the formation of the district and the dissolution of existing districts in
34 accordance with state law. State law provides that the Council shall issue an
35 order regarding district formation following the final hearing. This Ordinance
36 constitutes the order regarding district formation required under RCW
37 86.15.030.
38

39 Section 2. A new Chapter 11.06 of the Pierce County Code, "Pierce County
40 Flood Control Zone District," is hereby adopted as shown in Exhibit A, which is attached
41 hereto and incorporated herein by reference.
42
43

1 Section 3. The boundary for the Pierce County Flood Control Zone District shall
2 be the entirety of Pierce County, Washington, which is described at RCW 36.04.270 as
3 follows:

4
5 Commencing at the mouth, midchannel, of the Nisqually River; thence following
6 the main channel of said river to its head; thence due east to the summit of the
7 Cascade mountains; thence northerly along the summit to the head of the Green
8 Water; thence westerly down said river to its confluence with White River; thence
9 down the main channel of White river to the intersection of the fifth standard
10 parallel; thence west along said line to the southeast corner of section thirty-one,
11 township twenty-one north, range four east of Willamette Meridian; thence north
12 along the east line of said section thirty-one to its intersection with the northerly
13 line of the Puyallup Indian Reservation; thence northwesterly on said line of the
14 Puyallup Indian reservation, projected northwesterly in a straight line, to its
15 intersection with the center line of Puget Sound; thence southwesterly and
16 westerly following the channel of Dalco Passage to the south entrance of Colvo's
17 Passage; thence down the channel of said passage to the northeast corner of
18 section sixteen, in township twenty-two north, range two east; thence west to the
19 northeast corner of section sixteen, in township twenty-two north, range one
20 west; thence southerly along the channels of Case's Inlet and Puget Sound, to
21 the middle of the mouth of the Nisqually River and place of beginning.
22

23 Section 4. It is the intent of the Council to establish an advisory committee by
24 separate ordinance.
25

26 Section 5. The Council requests that the Pierce County Flood Control Zone
27 District establish a fund to assist Pierce County jurisdictions with their flood and
28 stormwater control needs.
29

30 Section 6. The Council requests that the Pierce County Flood Control Zone
31 District limit the ad valorem property tax levy authorized by RCW 86.15.160 (3) to ten
32 cents per thousand dollars of assessed value.
33

34 Section 7. That entity, or contemplated entity, referenced in Resolution No.
35 10831 and characterized as a "flood control zone district", while failing to constitute a
36 formal flood control zone district under RCW 86.15, is nevertheless hereby abolished
37 and dissolved.
38

39 Section 8. Resolution Nos. 10831, 17086 and 17471 are each hereby repealed.
40
41

1 Section 9. This Ordinance shall become effective upon the Pierce County
2 Boundary Review Board issuing a final decision of approval for the boundary described
3 at Section 3 of this Ordinance.

4
5 **PASSED** this ____ day of _____, 2012.

6
7 ATTEST:

PIERCE COUNTY COUNCIL
Pierce County, Washington

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9
10
11 _____
12 **Denise D. Johnson**
13 Clerk of the Council

Joyce McDonald
Council Chair

14
15
16 _____
17 **Pat McCarthy**
18 Pierce County Executive
19 Approved ____ Vetoed _____, this
20 _____ day of _____,
21 2012.

22 Date of Publication of
23 Notice of Public Hearing: _____

24
25 Effective Date of Ordinance: _____
26
27