NOTICE OF DECISION

BEFORE THE SKAGIT COUNTY HEARING EXAMINER

Applicant: Skagit County Dike, Drainage and Irrigation District No. 12

Agent: John Semrau

Semrau Engineering and Surveying

2118 Riverside Drive Mount Vernon, WA 98273

Request/File No: Shoreline Substantial Development Permit PL12-0191

Location: North and west bank of Skagit River for 1.53 miles from Lafayette

Road to Gardner Road, east of Burlington, within Sec. 4, T34N,

R4E, and Sec. 33, T35N, R4E, W.M.

Shoreline Designation: Rural; Shoreline of Statewide Significance

Summary of Proposal: Shoreline stabilization and flood protection improvements to

existing levee along a 1.53 mile river stretch to increase flood protection for the City of Burlington. The height of the dike will be increased by a maximum of four feet. The toe (base) will be increased by approximately 60 feet in width. Widening will be

limited to an area landward of the existing levee toe.

SEPA Compliance: Final Environmental Impact Statement (FEIS) issued by City of

Burlington on July 16, 2010. No appeal.

Public Hearing: April 24 and June 12, 2013. Planning and Development Services

(PDS) Staff recommended approval. Testimony was received from representatives of the Dike District, the City of Burlington, Skagit County Public Works, and the City of Sedro Woolley.

Seven citizens testified, some pro and some con.

Decision: The application is approved, subject to conditions.

Reconsideration/Appeal: A Request for Reconsideration may be filed with PDS within 5

days of this decision. The decision may be appealed to the Board of County Commissioners by filing an Appeal with PDS within 5 days of the date of decision or decision on reconsideration, if

applicable.

Online Text The entire decision can be viewed at

www.skagitcounty.net/hearing examiner

PROCEDURE

- 1. The matter was initially heard before the Examiner on April 24, 2013. Thereafter the written record was held open for a week for additional written submissions.
- 2. Following the hearing, a check showed that some portions of the proceedings were not picked up by the recording equipment. Therefore, the Examiner scheduled a continuation of the initial session, in order to insure an opportunity for all to have their oral testimony preserved.
- 3. The continued hearing was held on June 12, 2013. No problem with the recorded record on that session has been identified.
- 4. At the initial hearing session, testimony was given by John Cooper for PDS; John Shultz, counsel for the Dike District; John Semrau, engineer for the project; Dan Lefeber, Dike District Manager, Dan Berentson, County Public Works, Margaret Fleek, Burlington planning director, Keith Wagoner, Sedro Woolley City Council and four members of the general public, Kenneth Johnson, Len Halvorson, Thomas Sheahan, and Bill McCord.
- 5. At the continued hearing all who testified at the initial session spoke again, with the exception of Kenneth Johnson and Bill McCord. In addition there was testimony from Lorna Ellestad, Dike District Commissioner, Mike Anderson, Sedro Woolley mayor, and citizens Larry Kunzler and Roger Ridgeway.
- 6. Good notes were taken at both sessions, so that even where verbatim testimony cannot be captured, the gist of each person's testimony has been preserved. Over the course of the entire hearing 37 exhibits were admitted, some of which restate oral testimony given.
- 7. Notice of both the initial hearing session and the continued hearing were given by mail, posting and publication in the manner required by law.

FINDINGS OF FACT

- 1. Skagit County Dike, Drainage and Irrigation District No. 12 (hereinafter the Dike District) seeks a Shoreline Substantial Development Permit (SDP) to make improvements to an existing dike on the Skagit River.
- 2. The subject project is the eastern extension of a larger levee upgrade effort initiated by the City of Burlington. Dike improvements within the City limits between Whitmarsh and Gardner Roads were authorized by the City through a SDP approved June 20, 2012.
- 3. The section to be improved through the instant application lies just east of the Burlington city limits. The location is along the north and west banks of the river extending from Gardner Road to Lafayette Road, within Sec. 4, T34N, R4E & Sec. 33, T35N, R4E, W.M. The river segment along the site is a statutorily designated Shoreline of Statewide Significance.

RCW 90.58.030(2)(e)(v)(A). The local Shoreline Master Program environment designation is Rural.

- 4. The proposal is to enlarge both the width and the height of the Dike District's existing Skagit River levee along a 1.53 mile long project site. The levee now ranges in height from 8 to 12 feet as measured from the top to the toe. It is approximately 80 feet in width, measured from toe to toe. The centerline of the dike is situated approximately 100 feet from the river at its closest point in the north (Lafayette Road) and approximately 1,100 feet from the river at its farthest point in the south (Gardner Road).
- 5. Under the proposal, the elevation at the top of the levee will be increased by as much as four feet and the base (toe) of the levee will be increased in width by approximately 60 feet. The widening will be limited to an area landward of the existing toe of the levee. The structural reinforcement is intended to prevent a dike failure during elevated flood events. As designed, the raised dike is expected to meet the Federal Emergency Management Agency (FEMA) requirement for three-feet of freeboard above the 100-year flood.
- 6. The site is an alluvial terrace that runs along the outer bend of an elongated river meander. Bank erosion is occurring along this reach and has progressed to the base of the levee on the north end. Rock has been placed at the waterward toe of the levee at this location.
- 7. At the upstream end (Lafayette Road), the dike does not tie into higher ground. At that point, in the Sterling area, even after completion of the subject project, the river is expected to overflow during major flood events. The overflow would proceed onto the flood plain north of the City and into the Gages slough, a channel the river has used historically in such situations. Flood waters would be conveyed around and through Burlington without significant inundation of developed urban properties.
- 8. The main purpose of the project is to improve flood protection for the urban core of Burlington. The applicant asserts that the dike raising and widening project can achieve this "while minimizing any upstream or downstream effects." The absence of a high-ground-tie-back would take pressure off the system and reduce the downstream flood peak.
- 9. The river bank opposite the project site is one of the undiked stretches of the river. On that side, floodwater backs up into the drainage of Nookachamps Creek. Farther upstream, the sewage treatment plant and environs of the hospital in Sedro Woolley are, in terms of flood potential, at dangerously low elevations. Opposition to the proposed permit was registered by, among others, the Skagit Conservation District and the City of Sedro Woolley. The Conservation District stated that "raising the levee will exacerbate flooding upstream in the Nookachamps at river flood stages that exceed the existing levee elevation."
- 10. The levee system involved has existed for more than 100 years. This part of the Dike District No. 12 system was established in 1895.
- 11. Under present federal regulations, the dike must be certified by a registered professional engineer and then reviewed and accepted by the Federal Emergency Management

Agency (FEMA) for accreditation before it can be included in the hydraulic modeling conducted to define the reach of the 100-year flood

- 12. In the absence of certification and accreditation, FEMA methodology in establishing 100-year flood elevations assumes that no levee exists and the overflow elevations used are at the top of the river bank, not at the top of the levee.
- 13. The subject action is being proposed in conjunction with an effort to obtain certification and accreditation of the improved dike. Once the certification and accreditation of the levee allow it to be included in hydraulic modeling, the revised modeling can form the basis for changing Flood Insurance Rate Maps (FIRMs).
- 14. The usefulness of this project depends on the selection of appropriate predictive flood flows. The project is intended to contain the 100-year flood (also referred to as the "base flood"). There is a question as to the level of flow constituting such a flood. Three different analyses are available: (1) Corps of Engineers (using USGS numbers), (2) Northwest Hydraulic Consultants, and (3) Pacific International Engineering. Of these, the Corps figures are the highest, NHC figures are in the middle, and the PIE figures are the lowest.
- 15. If the Corps figures are used, substantial inundation within urban Burlington would occur during a base flood even after the project. Under the PIE scenario the instant project would create a barrier that would effectively spare most of urban Burlington from flooding during such an event.
- 16. The applicants commissioned the PIE study and the instant application relies on the lower PIE figures. The certification/accreditation drive includes an effort to get FEMA to accept the PIE figures on flow.
- 17. The applicant is convinced that the PIE figures are a more accurate set of predictive numbers than the Corps figures, and that the project will provide the protection sought for the urban core of Burlington.
- 18. A major difference between the Corps and PIE figures is that the latter are derived from data acquired only from formal gaging at an upstream point on the Skagit near Concrete, a process that did not begin until 1924. The Corps supplements this data record with estimates of historic floods that occurred in the 19th and early 20th centuries, before official measurements were routinely made.
- 19. The City of Burlington and the Dike District prepared an Environmental Impact Statement (EIS) covering both programmatic actions and project actions. Programmatic actions included an effort to negotiate concurrence on the appropriate flood hydrology to be used by FEMA and the effort to obtain certification and accreditation of the raised levee without a high ground tieback. Project actions described in the EIS included the project for enlargement of the existing dike, of which the instant proposal is a part.

- 20. The EIS questions whether pre-gage historic flood estimates should be relied upon. New work appears to support the proposition that prior floods in 1909, 1917 and 1921 did not flood then-existing homes which by the USGS estimates would have been flooded many feet above the first floor level. On the present record, the PIE figures appear reasonable.
- 21. Approval of the subject project is being sought, while a more encompassing regional flood hazard mitigation strategy is being developed through what is known as the Skagit River General Investigation (GI). The GI has been underway for the past 18 years and its completion is at least several years away. The GI Study is being conducted by the United States Army Corps of Engineers with Skagit County as its local sponsor. (The Northwest Hydraulic Consultants hydrology was obtained pursuant to a contract with the County.)
 - 22. The GI Study project manager commented as follows on the subject application:

The [GI] involves a basin-wide comprehensive approach to flood risk management. A preferred alternative has not been selected for the GI and therefore, from the GI perspective, it hasn't been determined how this proposal fits within that framework. Uniformity in levee heights, levee raises in place, and an increased level of protection for urban areas are currently being analyzed in the GI process.

- 23. A representative of the Skagit County Department of Public Works testified that County is committed to the GI study and that it is scheduled to be finished by 2015. He stated, however, that the County has not requested that the instant project be deferred until the GI is finished.
- 24. There were written statements and testimony that criticized Burlington for going it alone on this project prior to the completion of the area-wide study. However, the record made here fails to show that the proposal at hand will prejudice or interfere with the GI study. A letter from the Chief of the Emergency Management Branch of the Corps of Engineers supports the issuance of the subject shoreline permit.
- 25. The final EIS was issued on July 26. 2010. It concluded that the levee improvements proposed will maintain structural stability and provide a measure of increased 100-year flood protection for Burlington. The EIS did not provide any rigorous analysis of the impacts of such a flood in the Nookachamps drainage or upstream in and around Sedro Woolley. The EIS merely states:

If Burlington and Dike District #12 are able to go forward with the concept to upgrade the existing levee segment with no extension to the east, this will continue to allow water to escape at Sterling and prevent any upstream backwater effects.

The EIS contains a graphic that shows a base flood elevation impact from this project of 0.1 foot in the Nookachamps basin using PIE hydrology. The project engineer testified that Sedro

Woolley is well upstream of even a 0.1 foot increase. The key to this minor predicted impact is the lack of a high-ground tie-back on the upstream end of the dike.

- 26. There was citizen testimony questioning the analysis of where water leaving the river in the Sterling area will go in a major flood. The Examiner was persuaded by the Applicant's presentation on the likely overland course of flood water.
- 27. Using PIE hydrology, the existing levee top is already largely at the 100-year flood elevation. There is a low spot just upstream of Gardner Road where raising the height will provide needed protection to the Burlington Sewer Treatment Plant. The Examiner finds that, in the main, raising the levee to achieve three feet of freeboard only provides a factor of safety. The proposed project was not shown likely to significantly impact upstream water surface levels in a base flood.
- 28. The aspects of the project that involve maintenance of existing structures are within the statutory Shoreline Act permit exemption. But, since the instant request involves increases in the girth and height of the levee, a Substantial Development Permit is required.
- 29. A number of fill and grade permits, for work on the dike, have been issued in recent years along the project corridor. Allegations were made that this prior work on the dike was not, in fact, exempt from shoreline permitting. These allegations are not relevant to consideration of the instant application which requests that a permit be approved for specified work.
- 30. Approving the permit requires an analysis of whether the proposed dike raising and widening comports with the Skagit County Shoreline Master Program (SMP). The Staff Report reviewed the project in light of the SMP provisions for Shoreline Stabilization and Flood Protection.
- 31. The project has been professionally designed and the design criteria of the SMP have been followed. The Staff noted that appropriate fill materials will be used and that no work is proposed waterward of the existing levy.
- 32. A Wetlands Site Assessment prepared by Graham-Bunting Associates predicted little impact to a wetlands complex next to the river adjacent to the project. Requirements for riparian buffers will be met with the use of some buffer averaging.
- 33. Overall, the Staff Report found that the project will not likely result in significant adverse impacts to areas upstream or downstream of the subject site, including impacts on fish and wildlife and wetlands. The Staff concluded that the project, as conditioned, will meet the SMP regulations for Shoreline Stabilization and Flood Protection. The Hearing Examiner concurs with this analysis. The Staff Report is by this reference incorporated herein as though fully set forth.
- 34. The applicants are convinced that the flood flow predictions they rely on are reasonable and that, therefore, the project they propose will in fact be worthwhile. They acknowledge that achieving certification/accreditation of the dike will probably take some time,

and may require more dike modification. But, they are anxious to get the work on the ground underway in order to provide the physical protection they believe to be necessary as soon as possible.

35. Any conclusion herein which may be deemed a finding is hereby adopted as such.

CONCLUSIONS OF LAW

- 1. The proposal is a substantial development and requires a Substantial Development Permit. RCW 90.58.140.
 - 2. The Hearing Examiner has jurisdiction over the subject matter. SMP 9.06.
 - 3. The requirements of SEPA have been met.
- 4. There was citizen testimony calling the whole idea of building dikes on the lower Skagit into question. The subject dike has been a fait accompli for over a century. The only thing before the Examiner in this case is whether the existing dike may be widened and raised consistent with the Washington State Shoreline Management Act (SMA).
- 5. Similarly, citizen testimony asserted that raising of this dike will violate Federal flood control standards. The Examiner's jurisdiction here is limited to SMA compliance under State law.
- 6. Shoreline stabilization and flood protection measures are permitted in the Rural environment under the SMP, subject to the General Regulations. SMP 7.16(2)(A)(3). The regulations allow such measures when high water threatens public and private property. SMP 7.16(2)(B)(2). The requisite threat, justifying flood protection measures, has been shown here.
- 7. The policies for Shorelines of Statewide Significance (SMP 5.03) set forth hierarchy preferences, which are as follows:
 - 1. The statewide interest should be recognized and protected over the local interest.
 - 2. The natural character of shorelines of statewide significance should be preserved.
 - 3. Uses of shorelines of statewide significance should result in long term benefits to the people of the state.
 - 4. The natural resources and ecological systems of shorelines of statewide significance should be protected.
 - 5. Public access to publicly owned areas in shorelines of statewide significance should be increased.
 - 6. Recreational opportunities for the public should be increased on shorelines of statewide significance.

- 8. Preferences (1) and (3) -- protection of the statewide interest and long term benefits to the people of the state -- are implicated here. The argument of the project opponents is essentially that the local concerns of the City of Burlington threaten the achievement of the broader public interest. However, because no significant adverse impacts from this project were demonstrated, there is no evidence in the record to support this position. Preferences (2) and (4), to the extent applicable here, are served by the wetlands protection which will be provided. Preferences (5) and (6) can be addressed through a condition of approval.
- 9. Accordingly, the Examiner concludes that the project, as proposed and conditioned, meets the policies and regulations of the Shoreline Act and of the local SMP. Further, no violation of regulations of the Department of Ecology has been shown. Therefore, the criteria for granting a Shoreline Substantial Development Permit have been met. SMP 9.02.
 - 10. Any conclusion herein which may be deemed a finding is hereby adopted as such.

CONDITIONS

- 1. The project shall be carried out as described in the application materials, except as the same may be modified by these conditions.
- 2. The applicant and its contractors shall comply with all applicable State and local regulations, including but not limited to water quality standards, erosion/sedimentation control measures, applicable clean air requirements, noise regulations, the flood damage prevention ordinance, critical areas and shorelines regulations
- 3. The applicant shall obtain all permits required for this undertaking and shall abide by the conditions of same.
- 4. If the demolition of any building occurs that reveals septic systems, drain fields, septic tanks, septic lines or pipes under the proposed project area, the contractor shall contact the Skagit County Health Department to obtain decommissioning approval. Any wells GB-1 to GB-9 impacted or removed from the project site shall be decommissioned per state requirements.
- 5. The applicant shall supply PDS with a complete and up-to-date listing of the Parcel Numbers of property affected by this project.
- 6. To the extent possible, the Dike District shall take appropriate steps to insure safe shoreline access to the public via trail along the top of the dike.
- 7. The project shall be commenced within two (2) years of the approval of this permit and completed within five (5) years thereof.
 - 8. Failure to comply with any condition may result in permit revocation.

DECISION

The requested Shoreline Substantial Development Permit (PL12-0191) is approved, subject to the conditions set forth above.

DONE, this 28th day of June, 2013.

Wick Dufford, Hearing Examiner

Transmitted to the Applicant, County Staff and parties of record: June 28, 2013.

See Notice of Decision, Page 1, for Reconsideration and Appeal information.