# North Shore Levee

# CITY OF ABERDEEN





#### Cities of Aberdeen and Hoquiam

#### **Funding:**

Chehalis River Basin Flood Authority

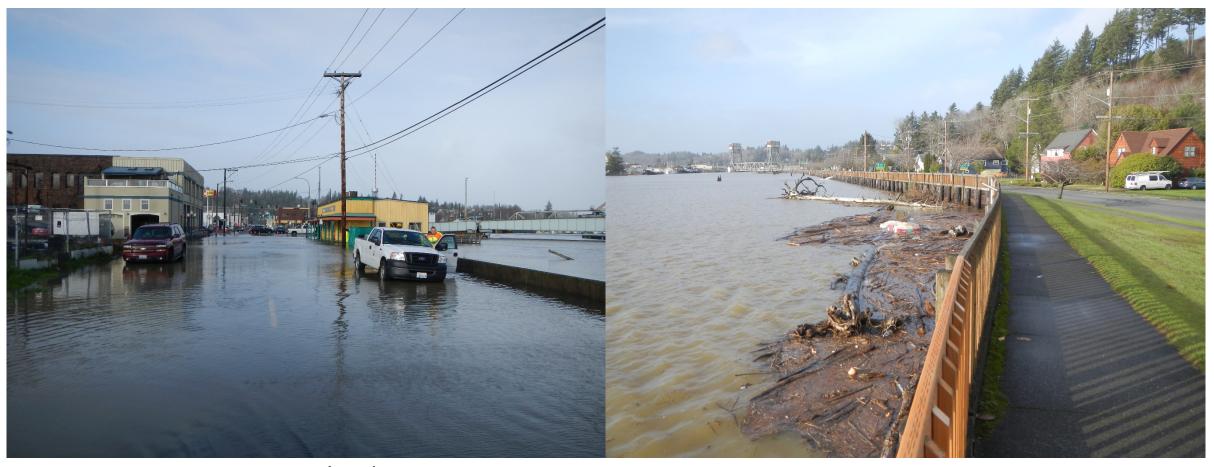
#### **Design Team:**

- KPFF Consulting Engineers
- Watershed Science & Engineering
- GeoEngineers
- Maul, Foster, & Alongi



## Existing Conditions – Flood Risk

(December 10, 2015 high tide)



F Street in Aberdeen

Riverside Avenue in Hoquiam

#### Existing Conditions – Flood Risk

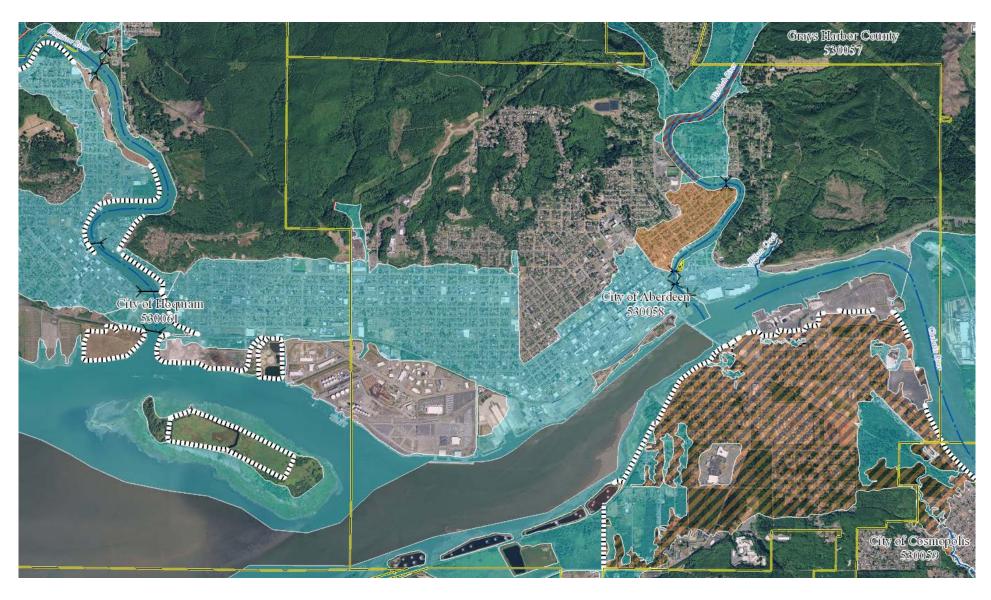
(January 4-5, 2015 rainfall event)



Conger Street in Aberdeen

Oak Street in Aberdeen

## Existing Conditions – FEMA Mapping



#### Living in a Special Flood Hazard Area

- Properties are susceptible to flooding. (\$\$\$)
- NFIP regulations add cost and complexity to development and redevelopment.
  - Redevelopment: If cumulative value of improvements made to a structure over past five years exceeds 50% of market value, structure must be brought into compliance with flood code. (\$\$\$)
- Flood insurance is mandatory with mortgages.
  - Rates are high and are increasing annually. (\$\$\$)



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**ECONOMIC LOSS, STIFLED INVESTMENT, AND LOW PROPERTY VALUES** 

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ECONOMIC LOSS, STIFLED INVESTMENT, AND LOW PROPERTY VALUES

BUILD LEVEE AND DRAINAGE IMPROVEMENTS, GET OUT OF SFHA

#### **Design & Construction Process**

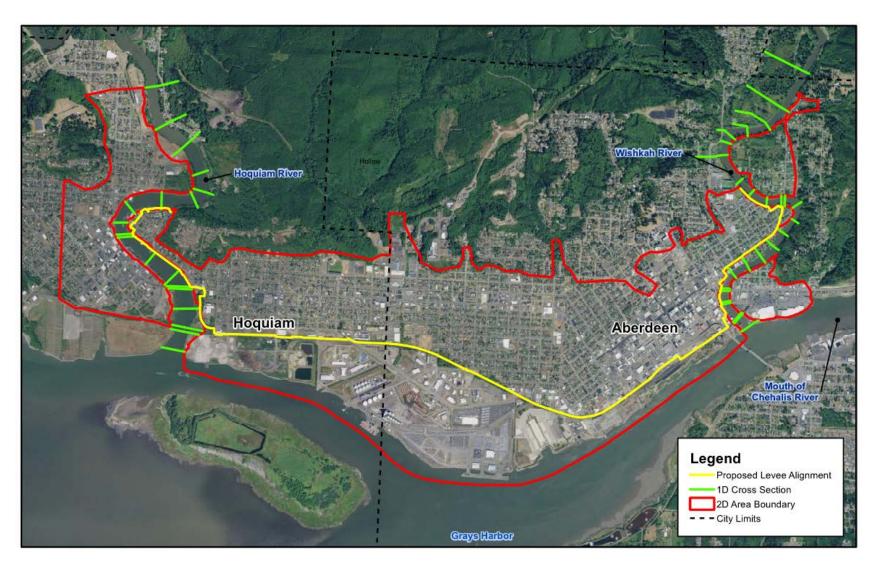
- 1. Surveying, Modeling, & Analysis
  - Aerial photography and photogrammetry
  - On-ground topographic surveying
  - Bathymetric surveying
  - Hydrologic and hydraulic modeling
  - Geotechnical investigation
- 2. First Phase of Public Outreach, Government & Agency Coordination
- 3. Develop Preliminary Design & Science Package, Submit to FEMA
- 4. Receive Conditional Letter of Map Revision (CLOMR) *Important!*
- 5. Second Phase of Public Outreach, Government & Agency Coordination
- 6. Final Design, Permitting, & ROW Acquisition
- 7. Construction
- 8. Levee Certification & Letter of Map Revision (LOMR) → Protected Areas Change from SFHA to Zone X

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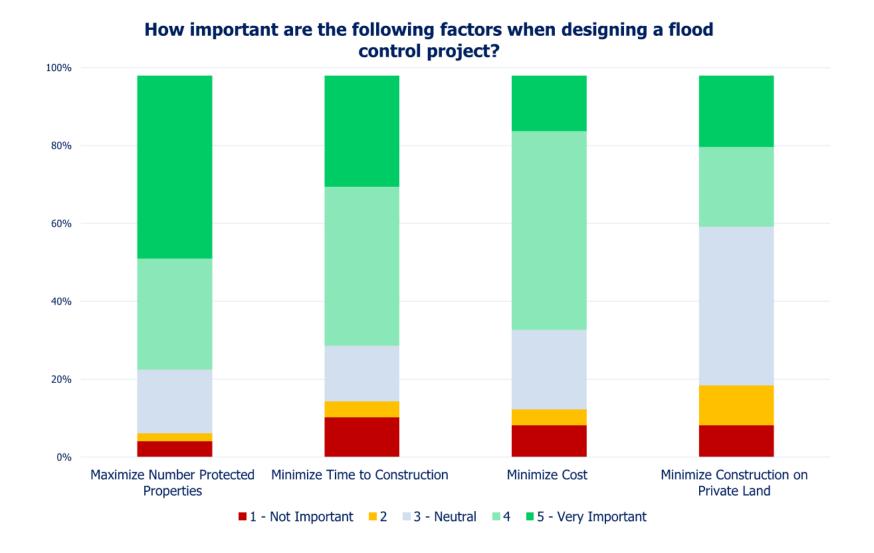
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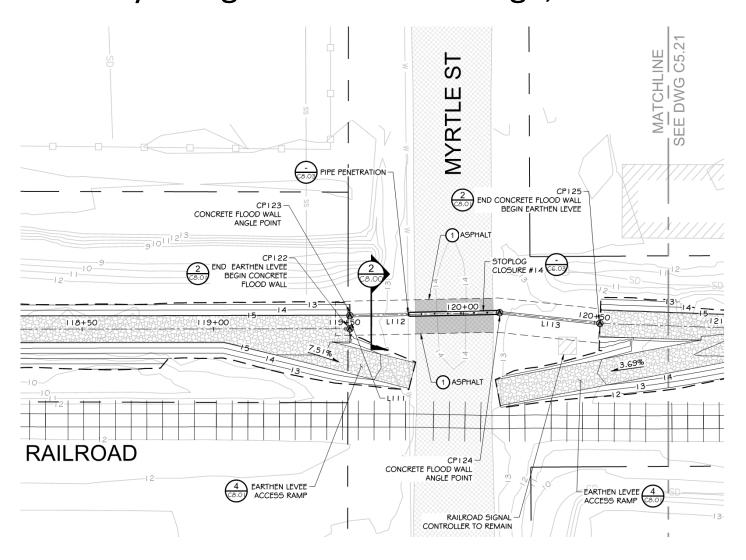
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3. Develop Preliminary Design & Science Package, Submit to FEMA 🔨





#### 4. Receive Conditional Letter of Map Revision (CLOMR)





#### Federal Emergency Management Agency

Washington, D.C. 20472

October 5, 2017

CERTIFIED MAIL RETURN RECEIPT REOUESTED

The Honorable Erik Larson Mayor, City of Aberdeen Aberdeen City Hall 200 East Market Street Aberdeen, WA 98520

17-10-1610R Community Name: City of Aberdeen, WA

Community No.:

Dear Mayor Larson:

We are providing our comments with the enclosed Conditional Letter of Map Revision (CLOMR) on a proposed project within your community that, if constructed as proposed, could revise the effective Flood Insurance Study report and Flood Insurance Rate Map for your community.

If you have any questions regarding the floodplain management regulations for your community, the National Flood Insurance Program (NFIP) in general, or technical questions regarding this CLOMR, please contact the Director. Mitigation Division of the Federal Emergency Management Agency (FEMA) Regional Office in Bothell, WA, at (425) 487-4682, or the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Sincerely.

Engineering Services Branch

Federal Insurance and Mitigation Administration

List of Enclosures:

Conditional Letter of Map Revision Comment Document

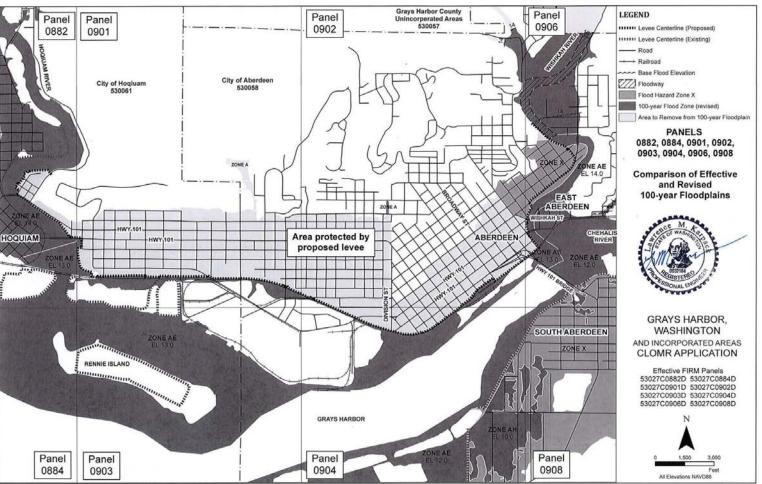
cc: The Honorable Jasmine Dickhoff Mayor, City of Hoguiam

> Mr. Kris Koski, P.E. City Engineer City of Aberdeen

Mr. Brian Shav City Administrator City of Hoquiam

Mr. David Radabaugh, CFM Washington Department of Ecology

Mr. Mark Steepy, P.E. KPFF Consulting Engineers



## **Upcoming Tasks**

- 5. Second Phase of Public Outreach, Government & Agency Coordination
- 6. Final Design, Permitting, & ROW Acquisition
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\* Partially funded through Chehalis River Basin Flood Authority (\$1.5 million)

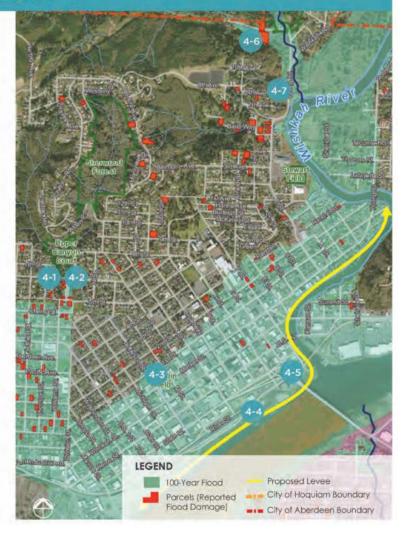
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- \*\* | Funding plan in development.

#### Focus Area 4: West Aberdeen

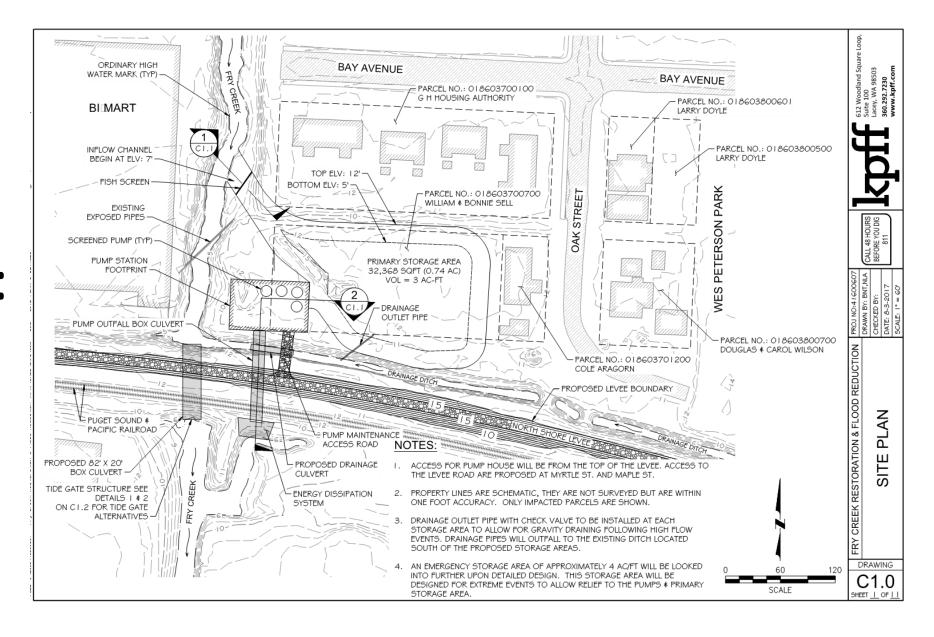
Tim	ber\	Worl	<b>S</b>
Mas	ter	Plan	

Project		Cost
4-1	Targeted Land Protection	LOW
4-2	Finch Playfield Flood Control Park	MED
4-3	Franklin Field Upgrade	MED
4-4	Upgrade Outfall Pumps	HIGH
4-5	North Shore Levee	HIGH
4-6	Stewart Creek Culvert Replacement	LOW
4-7	Stewart Creek Confluence Floodplain Reconnection	MED



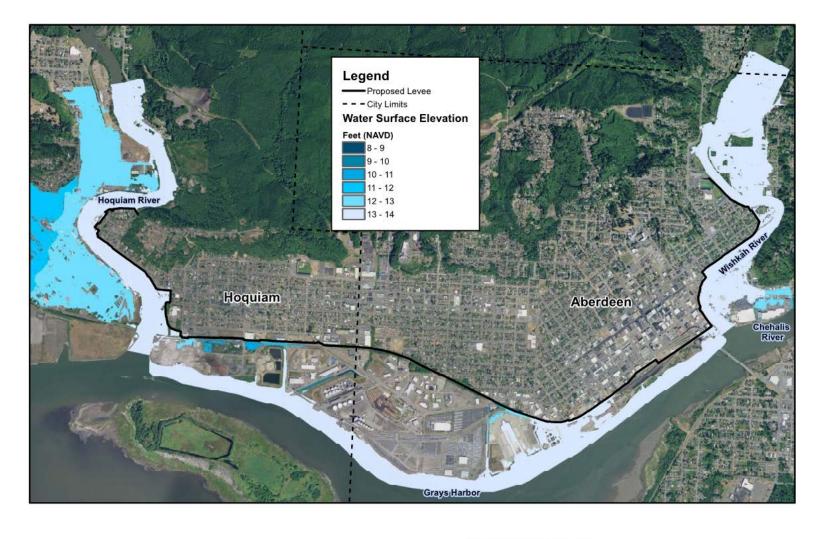
# Fry Creek Project Coordination:

## Future Pump Station



#### Thank You

Kris Koski, PE
City Engineer
City of Aberdeen
(360) 537-3218
kkoski@aberdeenwa.gov



www.ezview.wa.gov/aberdeenfloodrelief





