

Updating Bucoda's Floodplain Map and Floodplain Development Ordinance

July 28, 2015



Agenda for Tonight's Discussion

- 1. Introduction/Background** -- Scott Boettcher, Chehalis River Basin Flood Authority
- 2. Updated Floodplain Map** -- Larry Karpack, Watershed Science & Engineering
 - Existing (“Effective”) FEMA Floodplain Mapping
 - New Study Modeling and Analysis
 - Revised Flows
 - New Floodplain Mapping
 - Comparisons to Effective Mapping
- 3. Updating Floodplain Development Ordinance** -- Mark Riebau, French & Associates

1. Introduction/Background (Scott)

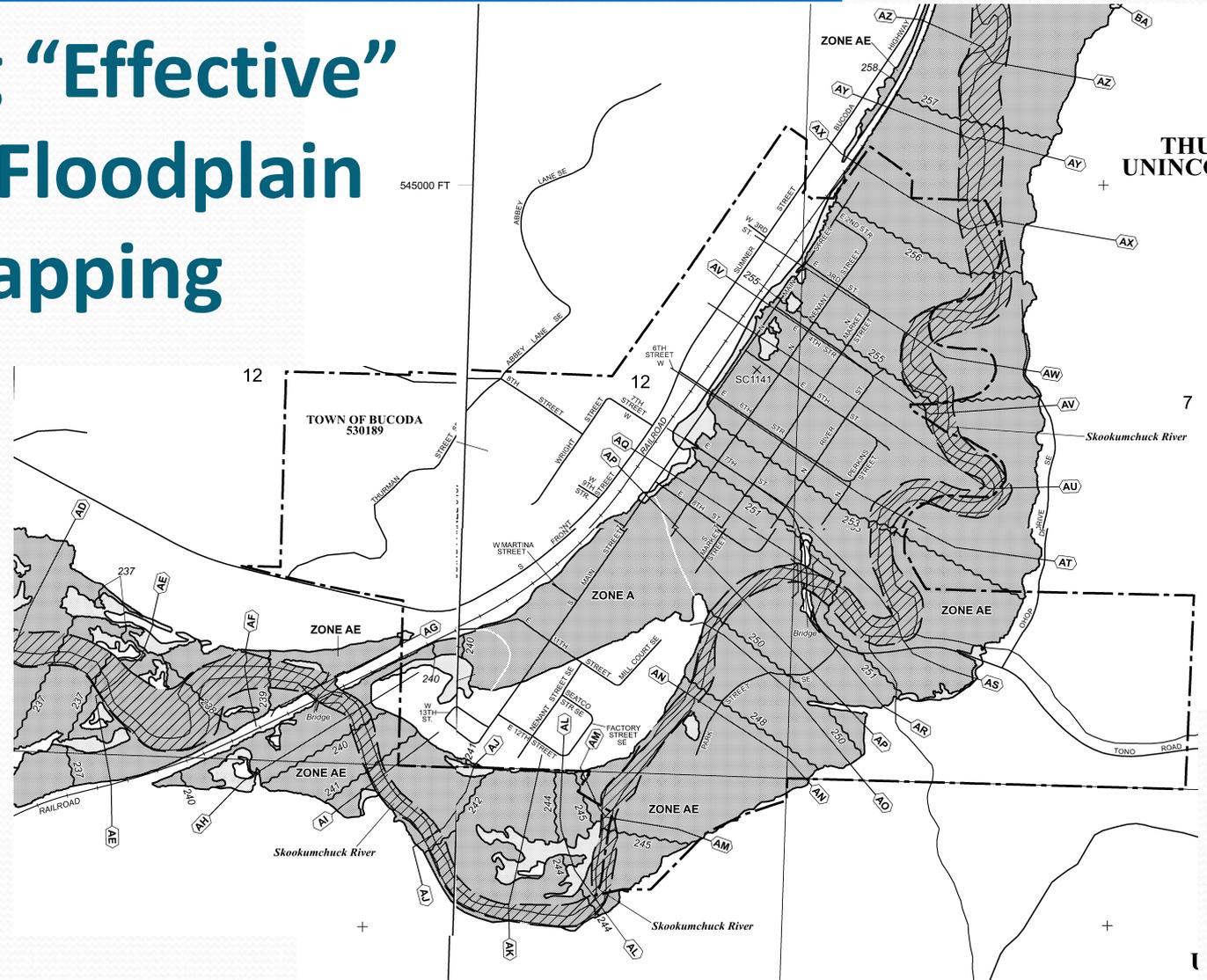
- Bucoda has been selected as “test pilot” for foundation flood opening program.
- First two properties are installing flood openings now . . .

Contractor	Property	Parcel	Start Date
Clean Space Northwest	303 N. Market Street	61800300900	1 st /2 nd week of August, 2015.
McCann Construction	407 N. Nenant Street	73001600901	Week of July 20, 2015.

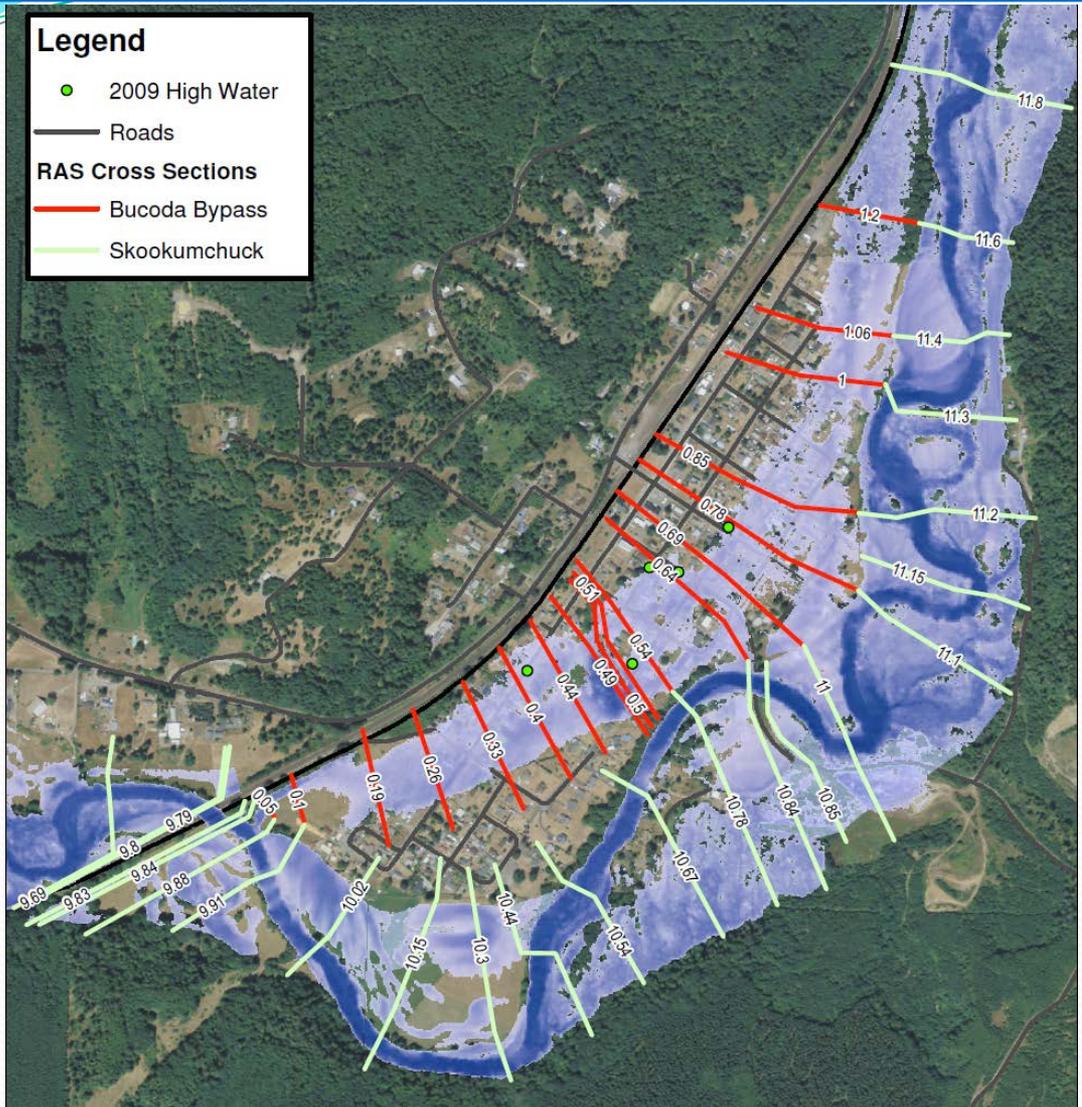
- First installations will complete full process before remaining properties.
 - a. Property access
 - b. Bidding and acceptance
 - c. Installation
 - d. Sign-off
 - e. Payment
- First installations found portions of Bucoda’s mapped floodplain did not have established flood depths (base flood elevations) and were designated “A-Zone.”

2. Updated Floodplain Map (Larry)

Existing "Effective" FEMA Floodplain Mapping



2. Updated Floodplain Map (Larry)



2. Updated Floodplain Map (Larry)

Revised Hydrology

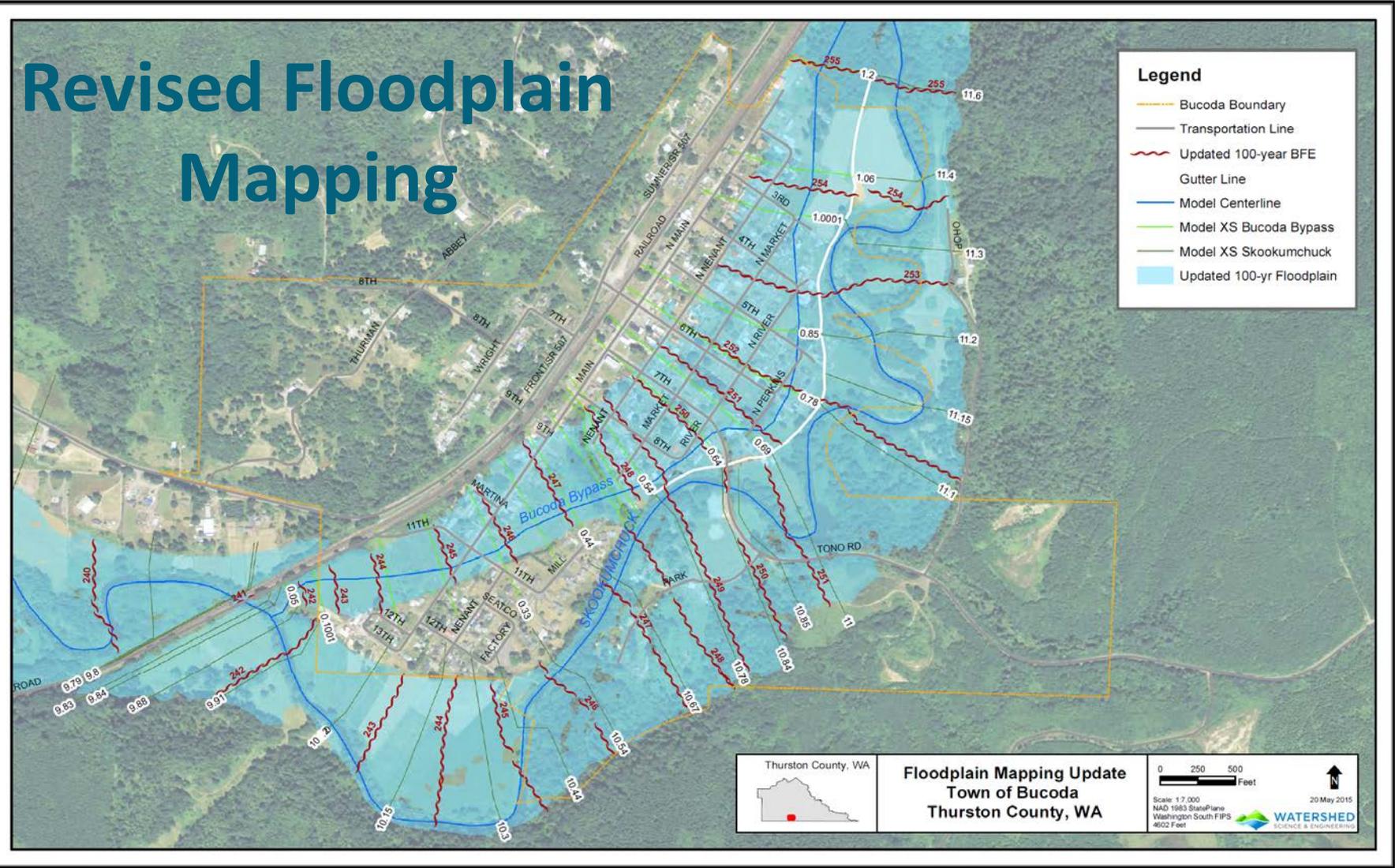
Table 1. Skookumchuck River Peak Flow at USGS Bucoda Gage

Event	Peak Flow (cfs)
Updated 100-Year	12,600
Feb 1996*	11,300
January 2009*	10,500
FEMA 100-Year	9,060

*USGS Observed Flow

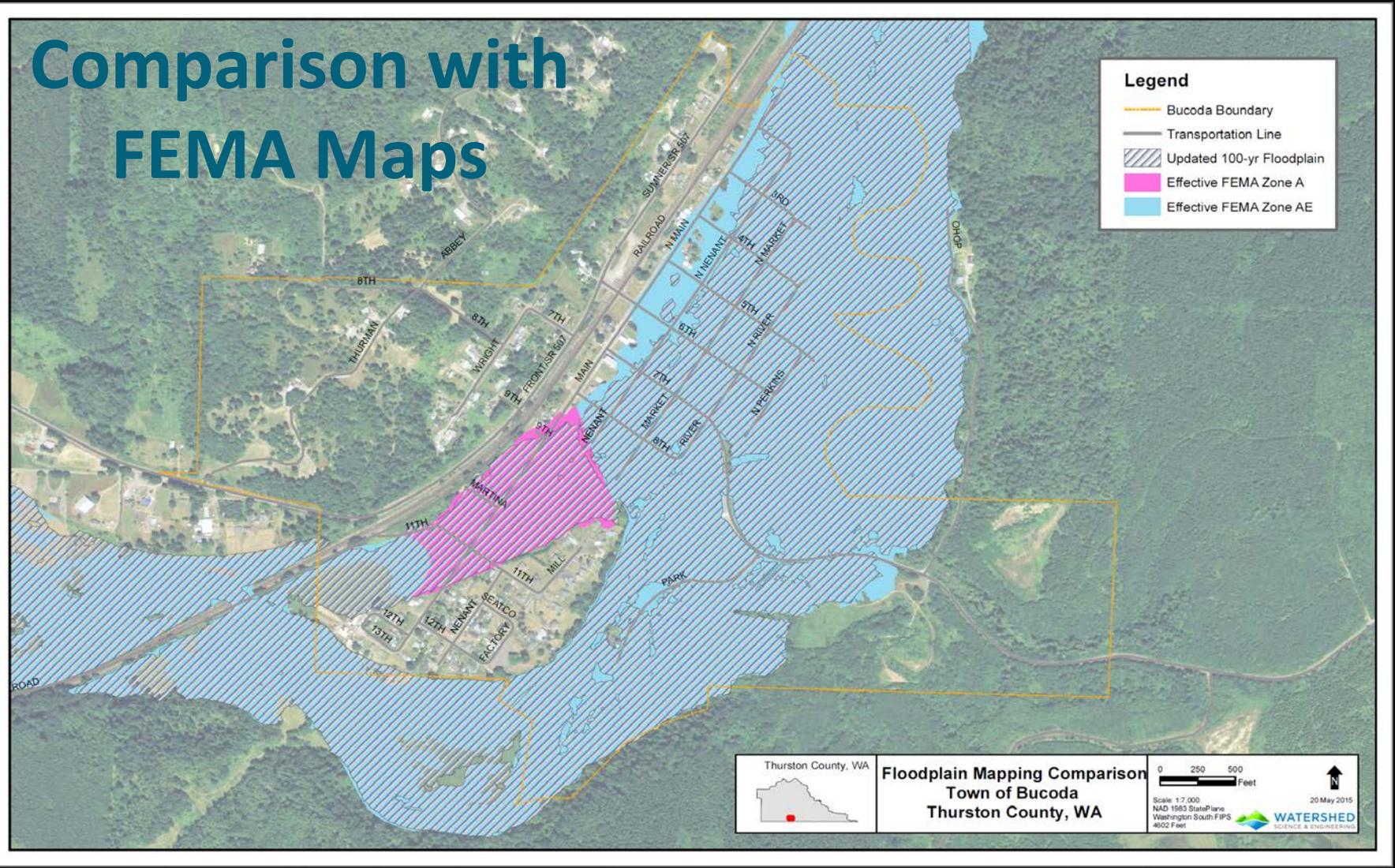
2. Updated Floodplain Map (Larry)

Revised Floodplain Mapping



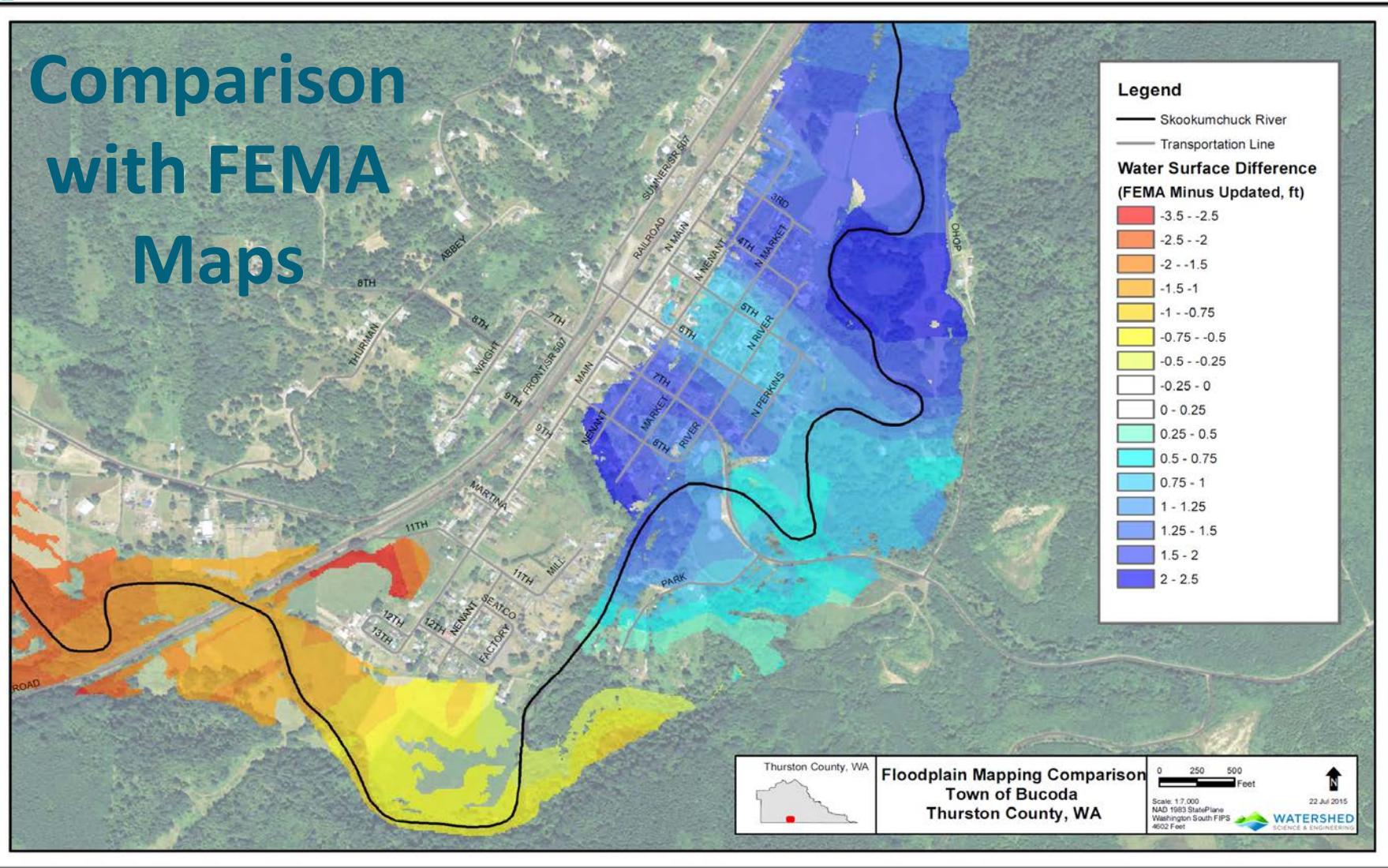
2. Updated Floodplain Map (Larry)

Comparison with FEMA Maps



2. Updated Floodplain Map (Larry)

Comparison with FEMA Maps



3. Updating Floodplain Development Ord. (Mark)

- **Who benefits?** People in A-Zone who would like to have flood openings installed benefit immediately.
- **How 1?** WSE study can be used as “Community Determined BFE” on the Elevation Certificate.
How 2? Bucoda must adopt WSE study to supplement FEMA FIS and FIRM.
How 3? By amending Bucoda’s Floodplain Development Ordinance to reference WSE study, map and elevations**.
- **Is it difficult?** No.
- **Does anybody approve Bucoda’s action?** Yes -- WA Dep’t of Ecology and FEMA.
- **Is it a problem?** No -- It happens all the time.

**CAUTION: Bucoda must continue to use the FIS/FIRM where the BFE is higher than the WSE study unless, and until, FEMA issues a revised FIRM.

Questions/Discussion

15 at Hwy 507 bridge Scott Boettcher 11 - December 4, 2007

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