

June 15, 2016  
King County Council  
Committee of the whole

- River Flooding
- Lake Flooding
- Local Drainage Flooding

Mark Isaacson, Division Director  
Water and Land Resources Division  
Department of Natural Resources and Parks

# River Flooding



Record rainfall: 43.33 inches in 6 months.

Snoqualmie River reached Phase 4 in November and December.

# Emergency Response

## Winter 2015-2016 Emergency Response Summary

- 1123 staff hours on patrol
- 226 hours Flood Warning Center Open
- Record Setting Public Demand for Information
  - 3000 Phone Calls to the Flood Warning Center
  - 12,000 Page views on the Flood App
  - 300,000 Page views on the Flood Warning Website
- 10,000+ sand bags distributed from eleven locations



Open for 6 flood events; flood patrols activated during all floods.

# Skykomish River Highest Flood on Record



Damage to homes and infrastructure in the South Fork Skykomish River Valley. Flood warning improvements underway.

Countywide: Damage to approximately 40 locations.



# White River Response



White River deposition contributes to flooding in the City of Pacific area. Temporary barriers installed and home buyouts underway.

# Lakes and Willowmoor Transition Zone Flooding





# Horseshoe Lake



Horseshoe Lake  
January 2016, one  
week prior to the  
start of pumping.

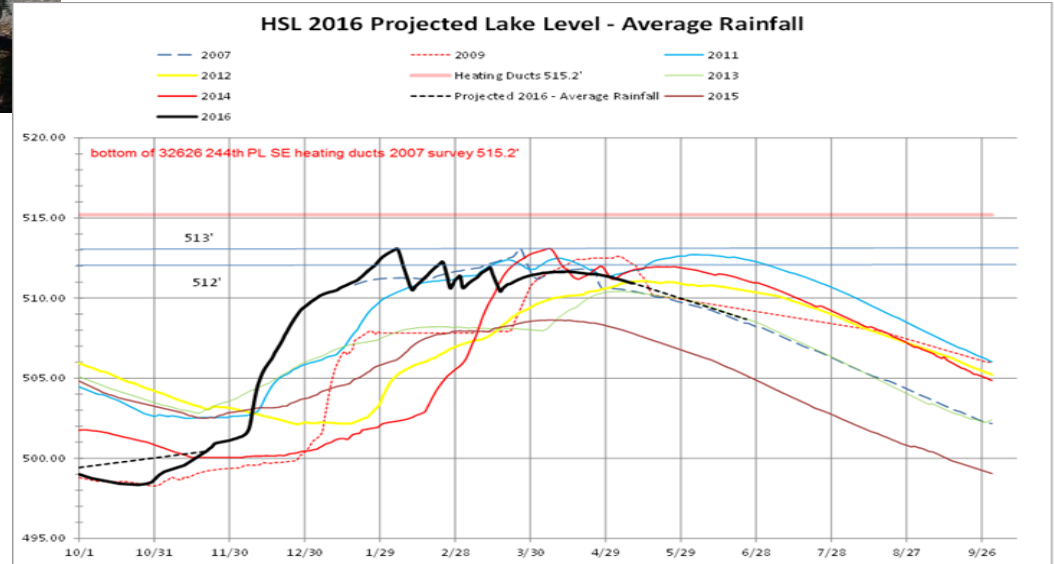
Pump and suction pipeline



# Horseshoe Lake



Pump discharge  $\frac{3}{4}$  mile south of the lake





# Allen Lake

Flooding over roadway at NE 8<sup>th</sup> Street near 250<sup>th</sup> Ave NE

Before vegetation  
control



After vegetation  
control



# Drainage and Flooding

## Projects:

- Burns Creek Sediment Removal
- Agricultural Drainage Improvements
- Seola Pond Enhancements
- May Creek Sediment Removal

## Maintenance:

- 1,100 Residential and Regional Stormwater Facilities
- Work with Owners of 900 Commercial Stormwater Facilities
- Work with King County Agencies of 130 Stormwater Facilities
- Technical Assistance for 350 low impact development BMP's

# Burns Creek Landslide



Flooding across the Green River Valley Road and then back over again.



# Burns Creek – Out of Banks



Burns Creek Overbank Flooding  
and Sediment Deposition



Burns Creek Channel Deposition  
and Flooding around Private  
Bridge

# Burns Creek Sediment Removal



Flow Returned to Original  
Channel and Floodwaters no  
longer Crossing Road

Excavated approximately 300  
cubic yards of sediment



# Agricultural Drainage Improvements



## Agriculture Ditches Cleaned:

- 3,000 linear ft in 2014
- 11,700 linear ft in 2015
- 5,000-10,000 linear ft in 2016
- 12,000 linear ft in 2017 is target



# Seola Pond Enhancements



Above: Seola Pond during construction to reduce flooding, and improve water quality.

Below: Installing a new manhole at Seola Pond outlet.



# Seola Pond





# May Creek Channel



Left: constricted by reed  
canary grass and sediment.

- 5,870 cubic yards of sediment removed
- Approximately 120 pieces of wood and over 30,000 plants installed





# May Creek Channel

Long Marsh Creek was enlarged to trap sediment prior to entry into the main May Creek channel.



# Thank you!

Mark Isaacson, Division Director  
[Mark.isaacson@kingcounty.gov](mailto:Mark.isaacson@kingcounty.gov)  
206-477-4601

Stormwater Drainage Hotline  
206-477-4811

Flood Warning Center  
206-296-8200  
1-800-945-9263  
[www.kingcounty.gov/services/environment/water-and-land/flooding/warning-system.aspx](http://www.kingcounty.gov/services/environment/water-and-land/flooding/warning-system.aspx)