

# December 2015 Storm Event

County Road Advisory  
Committee Briefing  
January 11, 2016





# Issues from the Storm

- Road Closures
- Landslides
- Culvert & Drainage/Ditching
- Community Isolation
- Damage Assessment
- Staffing concerns
- Cost

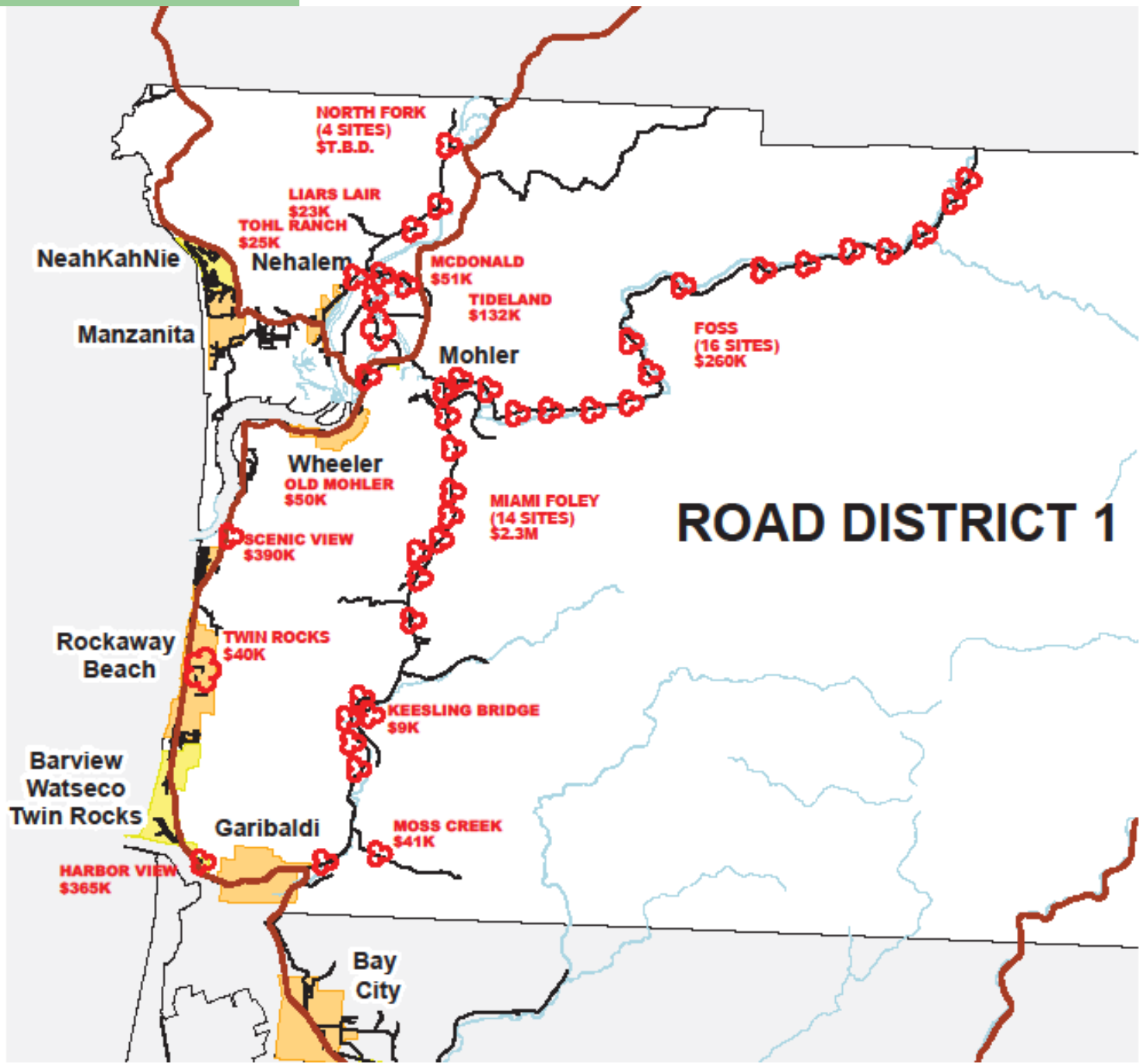


# Public Safety is our highest priority

- ✓ Storm response
- ✓ Response to landslides and 911 callouts
- ✓ Emergency preparedness
- ✓ Egress design to prevent community isolation



Wilson River Loop road (N-S) High Water  
December 2015





# Miami Foley Road

Road Closures





# Miami Foley Road

Landslide





# Miami Foley Road

Culvert & Drainage/Ditching





# Keesling Bridge (Miami)







# Lommen Bridge (Miami)





# Frank Crane Road (Pvt)

Culvert & Drainage/Ditching





# Foss Road

## Culvert & Drainage/Ditching



MP 5.5



# Foss Road

Culvert & Drainage/Ditching





# Harbor View Drive

## Culvert & Drainage/Ditching





# Scenic View Court (Pvt)

Culvert & Drainage/Ditching





# South Island Street

Culvert & Drainage/Ditching



AM 9:49 DEC/14/2015



Barview  
Watseco  
Twin Rocks

Garibaldi

Bay  
City

PIKE  
\$15K

KILCHIS  
\$14K

ALDERBROOK  
\$46K

Idaville

Siskeyville

BAYOCEAN  
\$578K

BAYOCEAN  
\$30K

Oceanside

SOLLIE SMITH  
\$1.2M

Tillamook

HAPPY CAMP  
\$35K

Netarts

WHISKEY CREEK  
\$320K

# ROAD DISTRICT 2





# Pike Road

## Culvert & Drainage/Ditching



AM 9:46 DEC/17/2015



# Kilchis River Road

## Culvert & Drainage/Ditching





# Bayocean Road

Culvert & Temporary Bridge





# Bayocean Road Community Toasts Public Works





# Whiskey Creek Road

Landslide





# Portland Avenue, Oceanside





# Wilson River Loop Road (N-S)

Road Closures



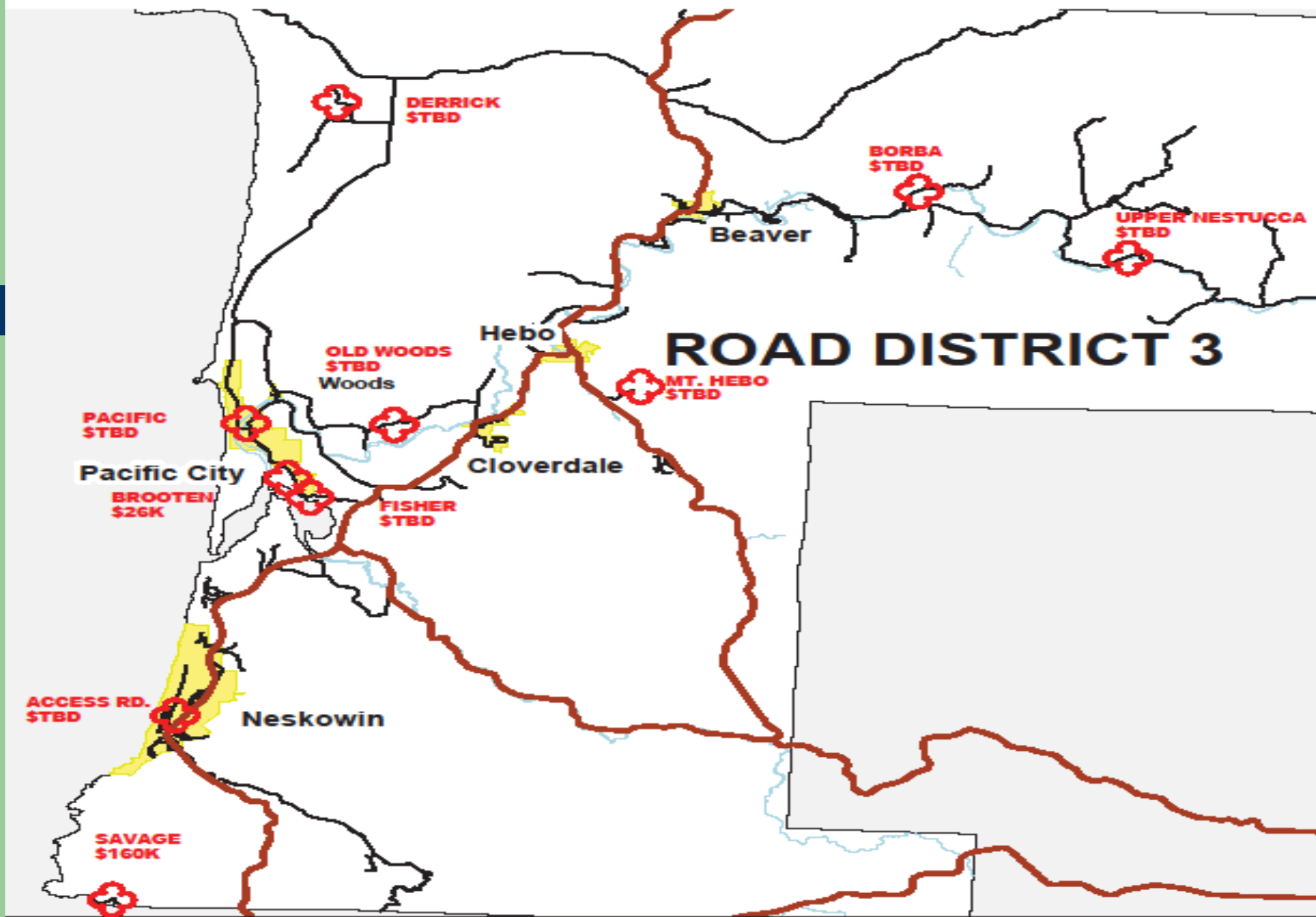


# Sollie Smith Road

Culvert Blocked & Temporary Bridge to Avoid Community Isolation









# Savage Road

Landslide





# Borba Road

Landslide





# Borba Road

Landslide





# East Creek Road





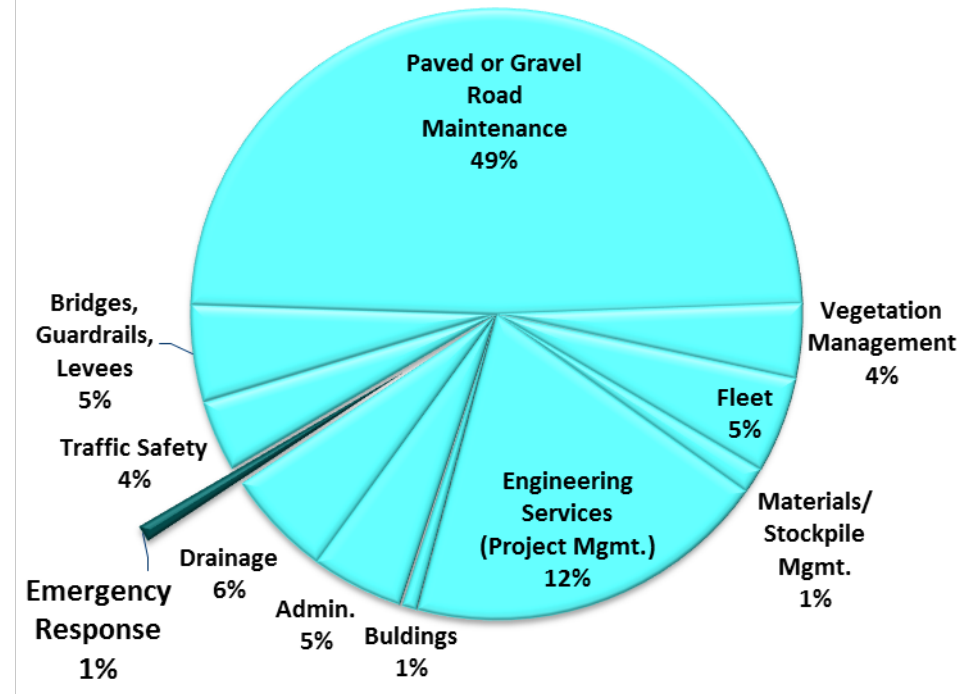
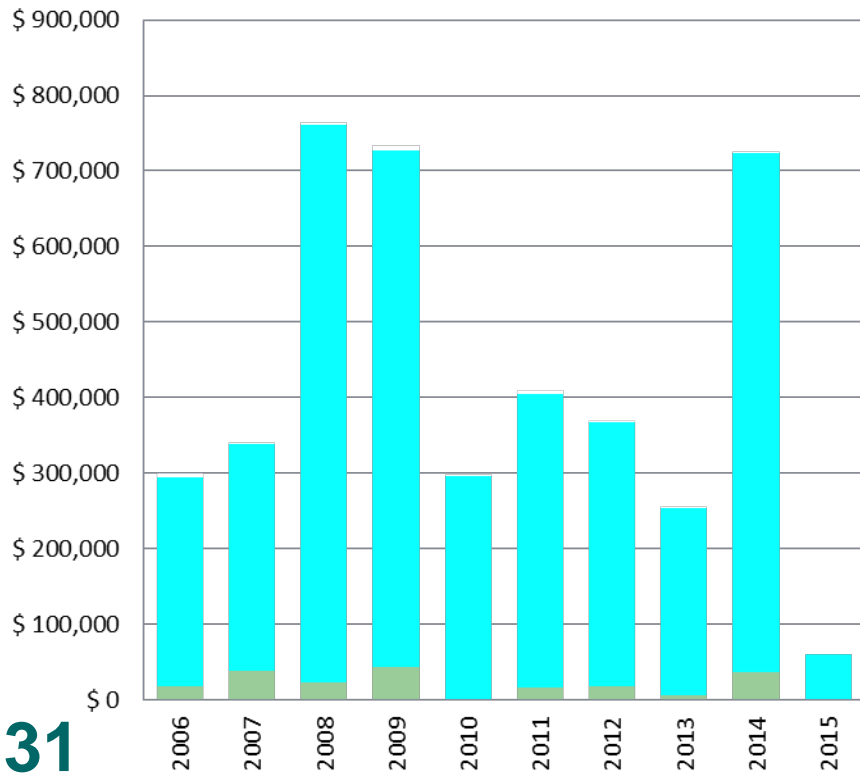
# December 2015 Storm Costs - \$8M

## Preliminary Cost Estimates

| Site #       | Brief Description of Damage or Cost                   | Location                       | Comments (Impacts)   | On-system or off-system | Emergency Cost     | Permanent Cost     | Estimated Cost     |
|--------------|---|--------------------------------|----------------------|-------------------------|--------------------|--------------------|--------------------|
| 1            | Culvert and 15' of roadway damage. 12/12/15:          | 3460 Bayocean Road             | Community of Cape    | On                      | \$101,000          | \$477,000          | \$578,000.00       |
| 2            | Culvert blocked and east bound lane destroyed,        | 8400 Sollie Smith Road         | Potentially isolated | Off                     | \$279,000          | \$939,000          | \$1,218,000.00     |
| 3            | Culvert destroyed, 35' of roadway destroyed.          | 14705 Harbor View Drive        | Seven homes          | Off                     | \$157,000          | \$208,000          | \$365,000.00       |
| 4            | Culvert destroyed and 30' of embankment.              | 29000 Miami-Foley Road (MP     | Main North-South     | On                      | \$55,000           | \$1,758,000        | \$1,813,000.00     |
| 5            | Culvert destroyed along with 40' embankment and       | Miami Forest Road              | At least one home    | Off                     | \$0                | \$1,825,000        | \$1,825,000.00     |
| 6            | Drift lodged on upstream side of bridge. County       | New Miami River Road,          | Potential to         | Off                     | \$9,000            | \$0                | \$9,000.00         |
| 7            | Landslide removal. County crew removed 800 Cuyd       | Miami-Foley Road MP 8          | Main North-South     | On                      | \$32,000           | \$428,000          | \$460,000.00       |
| 8            | Landslide removal, Contractor (Billstine) to remove,  | Whiskey Creek Road MP 4.1      | Whiskey Creek road   | On                      | \$309,000          | \$0                | \$309,000.00       |
| 9            | Damaged Culverts, 95 CUYD's of material               | Kilchis River Road             | no impacts at this   | On                      | \$0                | \$14,000           | \$14,000.00        |
| 10           | Landslide removal, approximately 100 cuyd's.          | Whiskey Creek Road MP 5        | road narrowed to     | On                      | \$8,000            | \$0                | \$8,000.00         |
| 11           | Landslide destroyed two twin 36" culverts and         | Scenic View Court              | Isolating one        | Off                     | \$168,000          | \$220,000          | \$388,000.00       |
| 12           | Multiple Landslides and Debris Flows. County          | Foss Road MP 0 to 16           | one lane restriction | On                      | \$261,000          | \$0                | \$261,000.00       |
| 13           | Damaged 7' diameter Culvert with outfall section      | Miami-Foly Road MP 7.5         | Could close Main     | On                      | \$0                | \$53,000           | \$53,000.00        |
| 14           | Landslide on downhill side of road, potential to      | Savage Road                    | serves 42            | Off                     | \$0                | \$160,000          | \$160,000.00       |
| 15           | 36" pipe, road undermined and creek bypassing         | Pike Road MP 0.1               | 7-10 residences      | Off                     | \$0                | \$15,000           | \$15,000.00        |
| 16           | Landslide, 600 Cuyd's. County Forces cleaning up.     | Bayocean, MP 2                 | closed for a short   | On                      | \$30,000           | \$0                | \$30,000.00        |
| 17           | 2 landslide boat launch. 12/17/15 occurrence. No      | Brooten Road, Pacific City     | Unknown at this      | On                      | \$26,000           | \$0                | \$26,000.00        |
| 18           | System wide drainage damage, culvert                  | washington street/island road. | Access does not      | Off                     | \$40,000           | \$0                | \$40,000.00        |
| 19           | Moss Creek Road,culvert blocked, pavement and         | Moss Creek Road MP 1.3         | Temp access          | Off                     | \$0                | \$41,000           | \$41,000.00        |
| 20           | 60-80 cuyd's of slide material to remove, culvert may | Shiffman Road                  | Unknown at this      | Off                     | \$0                | \$7,000            | \$7,000.00         |
| 21           | Road flooded out with 350 Cuyd's of sediment, plus    | McDonald Dike Road             | Travel way open, but | Off                     | \$0                | \$51,000           | \$51,000.00        |
| 22           | 440 cuyd's of sediment removal, possible shoulder     | Liars lair                     | Travel way open, but | Off                     | \$0                | \$23,000           | \$23,000.00        |
| 23           | 1,400' shoulder rock, 150 Cuyd's of shoulder repair   | AlderBrook Road                | Travel way open, but | On                      | \$0                | \$46,000           | \$46,000.00        |
| 24           | 125' of road replacement, shoulder repairs,           | Tideland Road                  | Travel way open, but | Off                     | \$0                | \$132,000          | \$132,000.00       |
| 25           | 0.9 mile inundated with sediment and woody debris,    | Tohi Ranch Road                | Travel way open, but | Off                     | \$0                | \$25,000           | \$25,000.00        |
| 26           | slow moving slide progressing                         | Old Wheeler Mohler road        | Travel way open, but | Off                     | \$0                | \$50,000           | \$50,000.00        |
| 27           | Shoulder and road surface                             | Gods Valley Road               | Travel way open, but | Off                     | \$0                | \$20,000           | \$20,000.00        |
| 28           | Contractor cleaned out culvert, need to restore       | Happy Camp Road                | None at this time    | Off                     | \$10,000           | \$25,000           | \$35,000.00        |
| <b>Total</b> |   |                                |                      |                         | <b>\$1,485,000</b> | <b>\$6,517,000</b> | <b>\$8,002,000</b> |



# Storm response is hard to predict, impacts the budget and wreaks havoc on an already fragile drainage system



- 1202 - Debris Removal
- 1161 - Flood/Wind/Slide
- 1160 - Snow Plow/Sanding



# Questions

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