25 Oct 2012 Project: Tillamook SFC HWY 101 Pg 1 of 5

24OCT2012

Total Benefits: \$141,099 Total Costs: \$10,000 BCR: 14.11

Project Number: Disaster #: Program: Agency: NHC

State: Oregon Point of Contact: Vaughn Collins Analyst: Rob Flaner

**Project Summary:** 

Project Number: Disaster #:

Program: Agency: NHC

Analyst: Rob Flaner

Point of Contact: Vaughn Collins Phone Number:

Address: Oregon

Email:

Comments:

## **Structure Summary For:**

Highway 101, Oregon, , Tillamook

Structure Type: Other Historic Building: No Contact:

Benefits: \$141,099 Costs: \$10,000 BCR: 14.11

Mitigation	Hazard	BCR	Benefits	Costs
Drainage Improvement	Damage-Frequency Assessment	14.11	\$141,099	\$10,000

25 Oct 2012 Project: **Tillamook SFC HWY 101** Pg 2 of 5

24OCT2012

Total Benefits: \$141,099 Total Costs: \$10,000 BCR: 14.11

Project Number: Disaster #: Program: Agency: NHC

State: Oregon Point of Contact: Vaughn Collins Analyst: Rob Flaner

Structure and Mitigation Details For: Highway 101, Oregon, , Tillamook

Benefits: \$141,099 Costs: \$10,000 BCR: 14.11

Hazard: Damage-Frequency Assessment - Flood

Mitigation Option: Drainage Improvement

Latitude: Longitude: Project Useful Life: 50

#### Mitigation Information

Basis of Damages: Expected Damages

Number of Damage Events: 3

Number of Events with Know Recurrence

Intervals: 3

### Roads And Bridges

**Estimated Number of One-Way** 

Traffic Trips Per Day: 17,100

Additional Time per One-Way Trip: 0:30

Number of Additional Miles: 5.0

Federal Rate: 0.550

Economic Loss Per Day of

Loss of Function: \$300,362

Facility Description:

Highway 101 Detour

25 Oct 2012 Project: **Tillamook SFC HWY 101** Pg 3 of 5

24OCT2012

Total Benefits: \$141,099 Total Costs: \$10,000 BCR: | 14.11

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State: Oregon Point of Contact: Vaughn Collins Analyst: Rob Flaner

#### **Expected Damages Before and After Mitigation**

Analysis Year: 2012 Analysis Duration: 63 Utilities (\$/day):
Year Built: 1950 User Input Analysis Duration: Buildings (\$/day):

Roads/Bridges (\$/day): \$300,361.50

#### **Damages Before Mitigation**

Damage Year: RI: 6.00

Are Damages In Current Dollars? Yes

Buildings (Days): Utilities (Days): Roads (Days): 1.3

Total \$390,4	Total	390,470
Total Inflated	Total Inflated	

**Damages After Mitigation** 

RI: 6.00

Are Damages In Current Dollars? Yes

Buildings (Days): Utilities (Days): Roads (Days): 1.1

Total	\$330,398

Damage Year: RI: 22.00

Are Damages In Current Dollars? Yes

Buildings (Days): Utilities (Days): Roads (Days): 1.3

\$390,470	Total
	Total Inflated

RI: 22.00

Are Damages In Current Dollars? Yes

Buildings (Days): Utilities (Days): Roads (Days): 1.1

To	otal \$330,398

Damage Year: RI: 100.00

Are Damages In Current Dollars? Yes

Buildings (Days): Utilities (Days): Roads (Days): 3.0

\$901,085	Total
	Total Inflated

RI: 100.00

Are Damages In Current Dollars? Yes

Buildings (Days): Utilities (Days): Roads (Days): 2.8

_			
r	7	Γotal	\$841,012

25 Oct 2012 Project: **Tillamook SFC HWY 101** Pg 4 of 5

24OCT2012

Total Benefits: \$141,099 Total Costs: \$10,000 BCR: | 14.11

Project Number: Disaster #: Program: Agency: NHC

State: Oregon Point of Contact: Vaughn Collins Analyst: Rob Flaner

**Summary Of Benefits** 

Expected Annual Damages Before Expected Annual Damages After Expected Avoided Damages After

Mitigation Mitigation Mitigation (Benefits)

Annual: \$77,371 | Annual: \$67,147 | Annual: \$10,224

Present Value: \$1,067,778 | Present Value: \$926,679 | Present Value: \$141,099

Mitigation Benefits: \$141,099 Mitigation Costs: \$10,000

Benefits Minus Costs: \$131,099 Benefit-Cost Ratio: 14.11

**Cost Estimate** 

Project Useful Life (years): 50 Construction Type:

Mitigation Project Cost: \$10,000 Detailed Scope of Work: Yes

Annual Project Maintenance Cost: \$0 Detailed Estimate for Entire Project: Yes

Final Mitigation Project Cost: \$10,000 Years of Maintenance: 50

Cost Basis Year: Present Worth of Annual Maintenance Costs: \$0

Construction Start Year: Estimate Reflects Current Prices: Yes

Construction End Year: Project Escalation:

25 Oct 2012 Project: **Tillamook SFC HWY 101** Pg 5 of 5

24OCT2012

Total Benefits: \$141,099 Total Costs: \$10,000 BCR: 14.11

Project Number: Disaster #: Program: Agency: NHC

State: Oregon Point of Contact: Vaughn Collins Analyst: Rob Flaner

# Justification/Attachments

Field	Description	Attachments
Facility Description	Documented in memorandum	