



Riprap Shoreline Protection Survey

Neskowin Coastal Hazards Committee



Riprap Shoreline Protection Survey

At the request of the Committee, OPRD completed a comprehensive field survey of the condition of each rip- rap structure on individual properties from South Beach to North Beach.

This is the first time that a field survey has been conducted on a community wide basis to determine the overall condition and stability of existing shoreline protection structures in Neskowin.

Riprap Shoreline Protection Survey

OVERALL STABILITY RATING (POOR, FAIR, GOOD)

P = Poor Condition: Structure settling/sinking, rocks unraveling , rocks plucked out, rock placement poor, rock quality fair, overall structure needs repair

F = Fair Condition: Minor structure settlement/sinking, some rocks unraveling or plucked out, rock placement fair, rock quality fair or a mixture of hard and softer material, overall structure requires some repair/maintenance but is functioning

G = Good Condition: Rocks in place no settlement/sinking, no unravelling ,no rocks plucked out, good rock placement, rock quality good, overall structure stable and functioning

Neskowin Riprap Structure Survey

RATINGS

SETTLING/SINKING, ROCKS UNRAVELLING/PLUCKING

None =	1
Minor =	2
Significant =	3-4
Major =	5

ROCK PLACEMENT / INTERLOCKING VOIDS

Good =	1
Fair =	3
Poor =	5

G = Good Condition:

Rocks in place no settlement/sinking, no unraveling, no rocks plucked out, good rock placement, rock quality good, overall structure stable and functioning



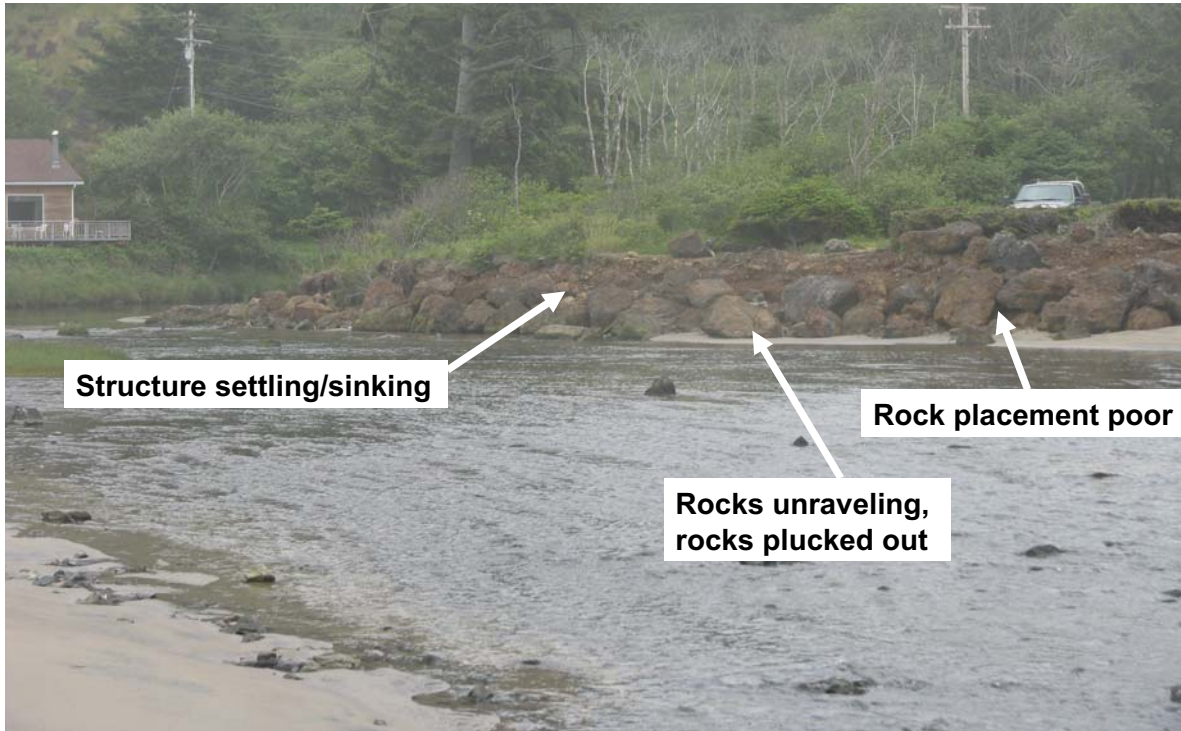
F = Fair Condition:

Minor structure settlement/sinking, some rocks unraveling or plucked out, rock placement fair, rock quality fair or a mixture of hard and softer material, overall structure requires some repair/maintenance but is functioning

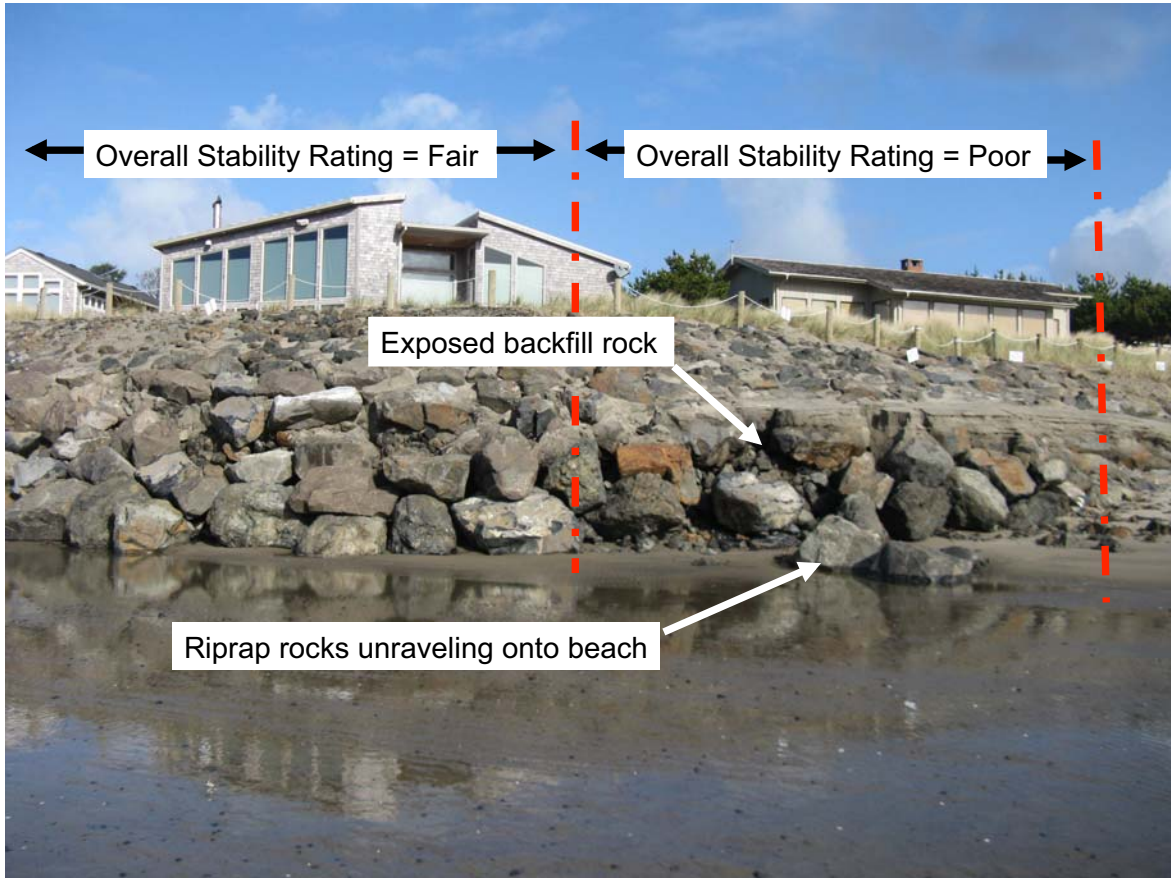


P = Poor Condition:

Structure settling/sinking, rocks unraveling , rocks plucked out, rock placement poor, rock quality fair, overall structure needs repair







Neskowin Oceanfront Tax Lots



NESKOWIN RIPRAP STRUCTURE SURVEY

RAW DATA

Name	Tax Lot	Address	Rock Type G/F/M	Average Rock Size (ft.)	Estimated Slope %	Settlement/ Sinking		Rocks Unravelling Plucking		Rock Placement/ Interlocking/ Voids		Current Overall Stability Rate: G/F/P	Comment
						Rate: 1-5	Rate: 1-5	Rate: 1-5	Rate: 1-5	Rate: G/F/P	Rate: G/F/P		
1 Erikson	500	No Situs Address	M	6'+	1.5:1	2 - 2	2 - 3	F - F	F - F	F - G		Mixed Rock	
2	Stairway		M	5' - 6'	1.5:1		4 - 4	F - F	P - F	P - F		Needs Repair	
3 Andrewson	400	49995 Seasand Rd.	G	5' - 6'	2:1	1 - 1	1 - 1	G - G	G - G	G - G			
4	Road		G	5' - 6'	1.5:1	1 - 1	1 - 2	G - G	G - G	G - G			
5 L.E.W.	100	No Situs Address	M	4' - 6'	1.5:1	1 - 1	1 - 2	G - G	G - G	G - G			
6 Iieff	2000	No Situs Address	M	4' - 6'	1.5:1	1 - 1	1 - 2	G - G	G - G	G - G			
7 Allgood	1900	49670 Surf Ln.	M	4' - 5'	1.5:1	1 - 1	1 - 1	G - G	G - G	G - G		Small Rock at Base	
8 Kelley	1800	49664 Surf Ln.	M	4' - 5'	1.5:1	1 - 1	1 - 1	G - G	G - G	G - G			
9 Crew	1700	49660 Surf Ln.	M	3' - 5'	1.5:1	1 - 1	2 - 3	F - F	F - F	F - F			
10	Stairway		M	3' - 5'	1.5:1	1 - 1	1 - 1	G - G	G - G	G - G			
11 Haruda	1600	49640 Surf Ln.	F	4' - 6'	1.5:1	1 - 1	1 - 2	F - G	G - G	G - G		Settling	
12	Road		M	3' - 5'	1.5:1	1 - 1	1 - 2	F - F	F - F	F - G			
13 Marsh	1500	49605 Nescove Dr.	F	3' - 4'	1.5:1	1 - 1	3 - 4	P - F	F - F	F - F			
14 Graske	500	49525 Nescove Dr.											
15 Ostrin	400	49485 Nescove Dr.	F	3' - 5'	1.5:1	1 - 1	2 - 2	F - F	F - F	F - F			
16 Beckham	300	49455 Nescove Dr.	F	3' - 6'	1.5:1	1 - 1	1 - 2	F - G	G - G	G - G			
17	Stairway	TL 360	F	3' - 6'	1.5:1	1 - 1	1 - 2	F - G	G - G	G - G			
18 Monroe	301	49435 Nescove Dr.	F	4' - 6'	1.5:1	1 - 1	1 - 2	F - G	G - G	G - G			
19 Andrews	3800	49500 Nescove Ct.	G	4' - 6'	1:1	1 - 1	3 - 5	P - F	P - F	P - F		Stacked 1:1	
20 Kingley	3801	49550 Nescove Ct.	G	3' - 5'	1:1	1 - 1	3 - 4	P - F	P - F	P - F			
21 Glasgow	3700	49400 Nescove Ct.	G	3' - 5'	1.5:1	2 - 2	3 - 4	P - F	P - F	P - F			
22 Running	3701	49390 Nescove Ct.	G	3' - 6'	1:1	1 - 2	3 - 4	P - F	P - F	P - F			
23		Beach Access + Lot	M	4' - 5'	1:1	3 - 4	5 - 5	P - P	P - P	P - P		Collapse of Access	
24 Martin	3600	49380 Rockview Wy.	F	3' - 5'	1:1	3 - 3	4 - 5	P - P	P - P	P - P			
25 Bertell	3500	49360 Rockview Wy.	F	3' - 5'	1:1	3 - 3	4 - 4	P - P	P - P	P - P			
26 Smith	3400	49340 Rockview Wy.	M	3' - 5'	1:1	3 - 3	3 - 4	P - F	P - F	P - P			
27 Thompson	3300	49330 Rockview Wy.	G	3' - 4'	1:1	1 - 1	3 - 4	P - F	P - F	P - F			
28 Rotz	3200	49300 Rockview Wy.	G	3' - 4'	1.5:1	3 - 4	4 - 4	P - P	P - P	P - F			

Riprap Shoreline Protection Survey

- OPRD survey was completed on April 20, 2010 at the existing beach sand elevation.
- 93 individual data points entered into the overall database. They included tax lots, private stairways, public right-of-ways and public beach access roads.

Riprap Shoreline Protection Survey

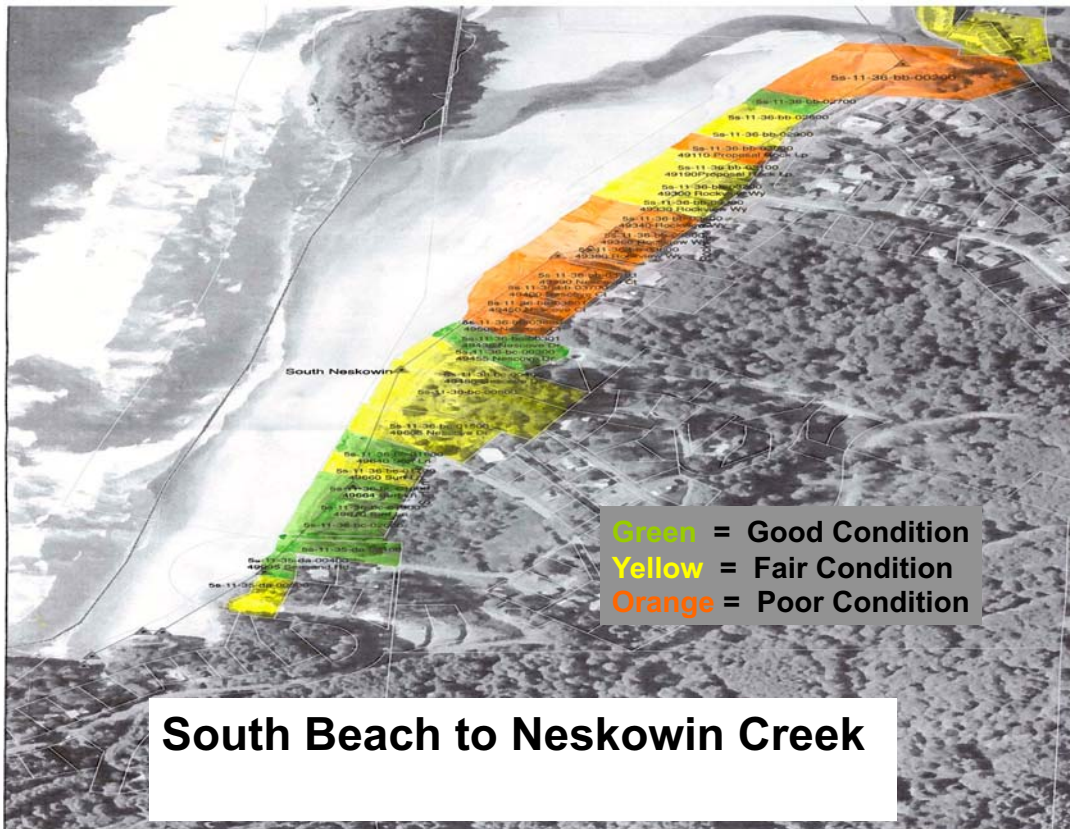
74 individual tax lots with riprap were surveyed

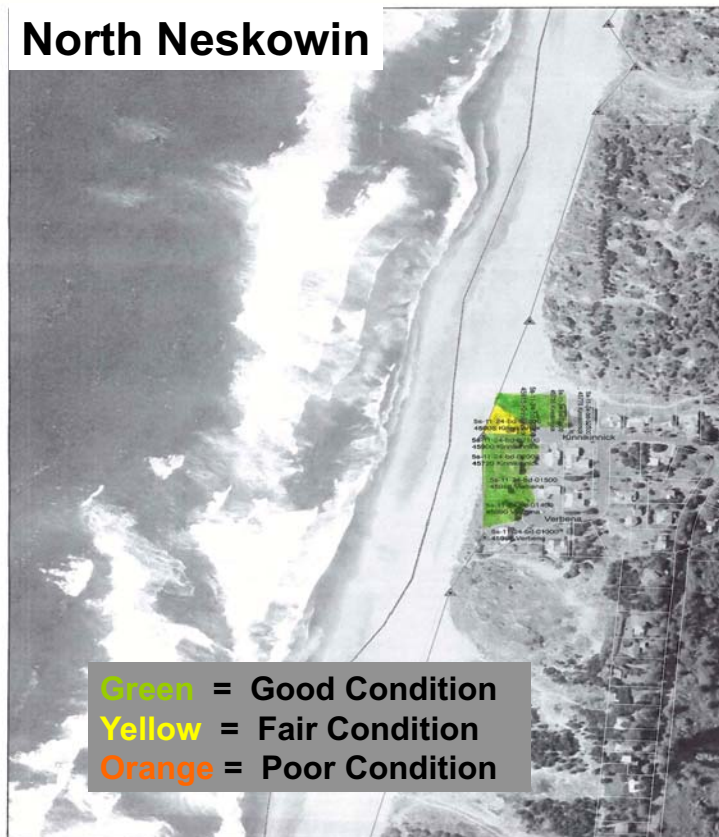
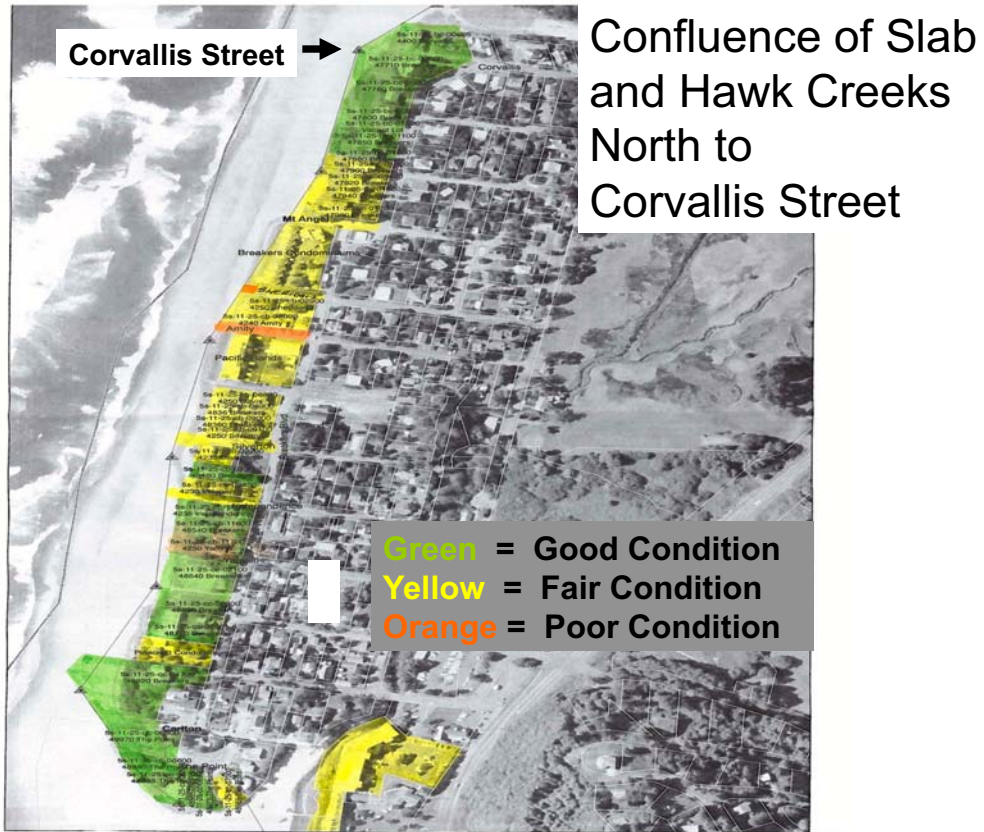
- *33 Tax Lots (GREEN) → Good Condition
- *30 Tax Lots (YELLOW) → Fair Condition
- *11 Tax Lots (ORANGE) → Poor Condition

RESULTS

85% percent of the structures were in fair to good condition

15% percent of the structures were in poor condition





OPRD Letters Sent to Property Owners **With Survey Observations**

• **Identified owner(s)** of the property located in Neskowin, Tillamook County Assessor's Map T5S, R11W, Section 25 CC, Tax Lot XXXXX.

• **Stated** the "Overall" condition and stability of the existing structure: Rated XXXX.

• **Defined** the general description of each rating is explained below: Good, Poor, or Fair

• **Explained OPRD rules and regulations:** property owners are required to maintain shoreline protective structures such as riprap. This includes retrieving and replacing rocks or other materials moved or damaged because of the ocean or any other cause.

• **Offered Assistance:** If maintenance repairs are necessary on your property, I would be happy to work with you and your contractor, to ensure that the appropriate restoration is completed using today's preferred riprap designs and engineering standards.

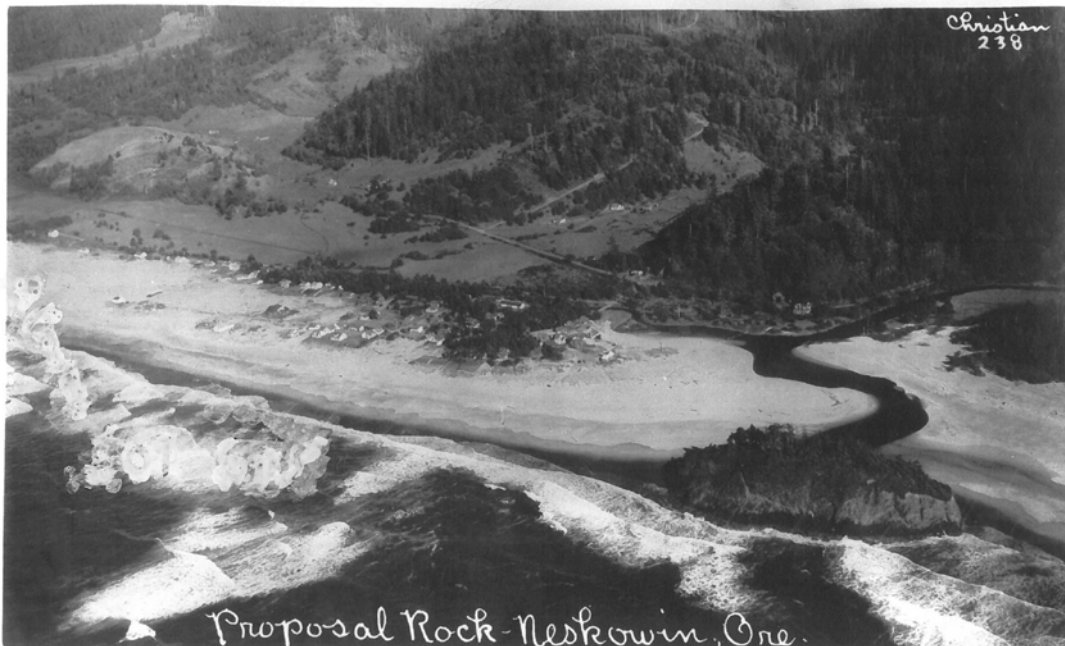
Survey Follow-Up

- **Several owners of "Poor" riprap structures have voluntarily contacted OPRD and completed repairs**
- **New riprap damage to "Poor and "Fair" structures have initiated homeowners to request repairs**
- **Several "Poor" structures remain, but are currently not a safety hazard to beach users or have rocks impeding beach access.**

Future Challenges to Neskowin Riprap Revetment Stability

- Continuous and Costly Riprap Repair Maintenance
- Continuous Beach Access Stairway Maintenance
- Continuous Sinking/ Settling of Structures
- Mass Wasting (Complete Loss of Structure)
- Wave Overtopping

Neskowin 1935



1935