

**Preliminary Cost Estimate:**

Conceptual Approach

Plant new vegetative buffers along both sides of stretches 14 & 15 within Portage Creek. Replace older catch basin structures within upland contributing drainage areas with dry well infiltration structures (could potentially be worked into upcoming roadway improvement projects). Create new vegetated filtration swales where possible.

Description	Qty.	Unit	Unit Cost	Cost
<b><i>Portage Stretch 14 &amp; 15 - Streambank Vegetative Buffers</i></b>				
2,550 ft x 2 vegetative buffer (20 ft width)	2.4	ac	\$2,500	\$6,000
mulch netting erosion controls	5,808	sq yd	\$2	\$11,616

<b><i>Portage Stretch 14 &amp; 15 - Upland Improvements</i></b>				
* Infiltration Structures within 79 acres of drainage area (assume 1 structure per 5 acres)	15	ea	\$5,000	\$75,000
vegetated filtration swales (10% of structure costs)				\$7,500

Subtotal	\$100,116
Contingency (20%)	\$20,023
Engineering Fees (10%)	\$12,014
<b>Estimated Total</b>	<b>\$132,153</b>

**Notes:**

- \* Dry well structures alone may not be protective of groundwater in some instances. Addition of a Vortechinics "pretreatment" structure would potentially add approximately \$12,000 per structure.