

Site:	Name:	Date:		
<b>Form S</b>				
<b>Stresser Data</b>				
<b>ORWAP V 3.2</b>				
S1	<b>Aberrant Timing of Water Inputs (AltTiming)</b>			
In the "Data" column, <b>place an X</b> next to any item that is likely to have caused the <b>timing</b> of water inputs (but not necessarily their volume) to shift by hours, days, or weeks, becoming either <b>more muted</b> (smaller or less frequent peaks spread over longer times, more temporal homogeneity of flow or water levels) or <b>more flashy</b> (larger or more frequent spikes but over shorter times).				
Control structure that regulates inflow to the AA (including tide gates), or flow regulation in tributaries, or water level in adjoining water body is regulated.				
Irrigation runoff or seepage.				
Snow storage areas that drain directly to the wetland.				
Increased pavement and other impervious surface in the CA.				
Straightening, ditching, dredging, and/or lining of tributary channels in the CA.				
If <b>any</b> items were checked above, then for each row of the table below, you may assign points (3, 2, or 1). However, if you believe the checked items had no measurable effect on the timing of water conditions in any part of the AA, then leave the "0"s for the scores in the following rows. To estimate effects, contrast the current condition with the condition, if the checked items never occurred or were no longer present.				
		Severe (3 pts)	Medium (2 pts)	Mild (1 pt)
Spatial extent within the AA of timing shift.		>95% of AA.	5-95% of AA.	<5% of AA.
When most of the timing shift began.		<3 yrs ago.	3-9 yrs ago.	10-100 yrs ago.
Score the following 2 rows only if the altered inputs began within past 10 years, and only for the part of the AA that experiences those.				
Input timing now vs. previously.		Shift of weeks.	Shift of days.	Shift of hours or minutes.
Flashiness or muting.		Became very flashy or controlled.	Intermediate.	Became mildly flashy or controlled.
				Sum= 0
				Final score= 0.00
S2	<b>Accelerated Inputs of Nutrients (NutrLoad)</b>			
In the "Data" column, <b>place an X</b> next to any item – occurring in either the AA or its RCA – that is likely to have accelerated the inputs of nutrients (nitrogen, phosphorus) to the AA.				
Stormwater or wastewater effluent (including failing septic systems), landfills.				
Fertilizers applied to lawns, ag lands, or other areas in the RCA.				
Livestock, dogs.				
Artificial drainage of upslope lands.				
Other waterborne human-related nutrient sources within the RCA.				
If <b>any</b> items were checked above, then for each row of the table below, you may assign points. However, if you believe the checked items did not cumulatively expose the AA to significantly more nutrients, then leave the "0"s for the scores in the following rows. To estimate effects, contrast the current condition with the condition if the checked items never occurred or were no longer present.				
		Severe (3 pts)	Medium (2 pts)	Mild (1 pt)
Usual load of nutrients.		Large (e.g., feedlots, extensive residential on septic) or 303d* for nutrients.	Moderate (e.g., grazing, light residential on septic, light agriculture).	Limited (e.g., a few animals, lawns, sewered residential).
Frequency & duration of input.		Frequent and year-round.	Frequent but mostly seasonal.	Infrequent & during high runoff events mainly.
AA proximity to main sources (actual or potential).		0 - <50 ft.	50-300 ft. or in groundwater.	In other part of contributing area.
				Sum= 0
				Final score= 0.00
S3	<b>Accelerated Inputs of Contaminants and/or Salts (Contamin)</b>			
In the "Data" column, <b>place an X</b> next to any item – occurring in either the AA or its RCA – that is likely to have accelerated the inputs of contaminants or salts to the AA.				
Stormwater or wastewater effluent (including failing septic systems), landfills, snow storage areas.				
Metals & chemical wastes from mining, shooting ranges, oil/ gas extraction, other sources.				
Irrigation of lands, especially those with saline soils.				
Oil or chemical spills (not just chronic inputs) from nearby roads.				
Road salt.				
Pesticides applied to lawns, ag lands, roadsides, or other areas in the RCA, but excluding spot applications for controlling non-natives in the AA.				
Artificial drainage of contaminated or saline soils.				
Erosion of contaminated soils.				
Other contaminant sources within the RCA.				
If <b>any</b> items were checked above, then for each row of the table below, you may assign points. However, if you believe the checked items did not cumulatively expose the AA to significantly higher levels of contaminants and/or salts, then leave the "0"s for the scores in the following rows. To estimate effects, contrast the current condition with the condition if the checked items never occurred or were no longer present.				
		Severe (3 pts)	Medium (2 pts)	Mild (1 pt)
Usual toxicity of most toxic contaminants.		Industrial effluent or 303d* for toxics.	Wastewater treatment plant, cropland, fossil fuel extraction, pipeline, power station, managed landfill.	Low density residential or commercial.
Frequency & duration of input.		Frequent and year-round.	Frequent but mostly seasonal.	Infrequent & during high runoff events mainly.
AA proximity to main sources (actual or potential).		0 - <50 ft.	50-300 ft. or in groundwater.	In other part of contributing area.
				Sum= 0
				Final score= 0.00
* See ORWAP Map Viewer for waters designated as 303d; see Oregon DEQ web site for reasons.				

S4 Excessive Sediment Loading from Runoff Contributing Area (SedRCA).				
<i>In the "Data" column, place an X next to any item present in the RCA that is likely to have elevated the load of waterborne or windborne sediment reaching the AA from its RCA.</i>				
Erosion from plowed fields, fill, timber harvest, dirt roads, vegetation clearing, fires.				
Erosion from construction, in-channel machinery in the RCA.				
Erosion from off-road vehicles in the RCA.				
Erosion from livestock or foot traffic in the RCA.				
Stormwater or wastewater effluent.				
Sediment from road sanding, gravel mining, other mining, oil/ gas extraction.				
Accelerated channel downcutting or headcutting of tributaries due to altered land use.				
Other human-related disturbances within the RCA.				
<i>If any items were checked above, then for each row of the table below you may assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in increasing the amount or transport of sediment into the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present.</i>				
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)	
Erosion in RCA.	Extensive evidence, high intensity*.	Potentially (based on high-intensity* land use) or scattered evidence.	Potentially (based on low-intensity* land use) with little or no direct evidence.	0
Recentness of significant soil disturbance in the RCA.	Current & ongoing.	1-12 months ago.	>1 yr ago.	0
Duration of sediment inputs to the AA.	Frequent and year-round.	Frequent but mostly seasonal.	Infrequent & mainly during high runoff or severe wind events.	0
AA proximity to actual or potential sources.	0 - <50 ft., or farther but on steep erodible slopes.	50-300 ft.	In other part of contributing area.	0
* High-intensity= plowing, grading, excavation, erosion with or without veg removal; low-intensity= veg removal only with little or no apparent erosion or disturbance of soil or sediment.				Sum= 0
				Final score= 0.00

S5 Soil or Sediment Alteration Within the Assessment Area (SoilDisturb).				
<i>In the "Data" column, place an X next to any item present in the AA that is likely to have compacted, eroded, or otherwise altered the AA's soil.</i>				
Compaction from livestock, machinery, off-road vehicles, or mountain bikes, especially during wetter periods.				
Leveling or other grading not to the natural contour.				
Tillage, plowing (but excluding disking for enhancement of native plants).				
Fill, riprap, other armoring, excluding small amounts of upland soils containing organic amendments (compost, etc.) or small amounts of topsoil stockpiled or imported from another wetland.				
Excavation.				
Dredging in or adjacent to the AA.				
Boat traffic in or adjacent to the AA and sufficient to cause shore erosion or stir bottom sediments.				
Artificial water level or flow manipulations sufficient to cause erosion or stir bottom sediments.				
<i>If any items were checked above, then for each row of the table below you may assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in altering the AA's soils. To estimate that, contrast it with the soil condition if checked items never occurred or were no longer present.</i>				
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)	
Spatial extent of altered soil.	>95% of AA or >95% of its upland edge (if any).	5-95% of AA or 5-95% of its upland edge (if any).	<5% of AA and <5% of its upland edge (if any).	0
Recentness of significant soil alteration in AA.	Current & ongoing.	1-12 months ago.	>1 yr ago.	0
Duration.	Long-lasting, minimal veg recovery.	Long-lasting but mostly revegetated.	Short-term, revegetated, not intense.	0
Timing of soil alteration.	Frequent and year-round.	Frequent but mostly seasonal.	Infrequent & mainly during scattered events.	0
				Sum= 0
				Final score= 0.00