Site Name:	Investigator:		Date:	
eld S data form. ORWAP version 2.0.2				
Wetter Water Regime - Internal Causes				
In the last column, place an X next to any item that is likely to have caused a part of the AA to be would be without that item or activity. (The items you check are not used automatically by ORW, table beneath them).	-		-	
an impounding dam, dike, levee, weir, berm, road fill, or tidegate within or downgradient from	m the AA, or raising of outlet of	culvert elevation.		
excavation within the AA, e.g., artificial pond, dead-end ditch				Γ
excavation or reflooding of upland soils that adjoined the AA, thus expanding the area of the A	AA			Γ
plugging of ditches or drain tile that otherwise would drain the AA (as part of intentional restor	ration, or due to lack of mainte	enance, sedimentation, etc.)		
vegetation removal (e.g., logging) within the AA				
compaction (e.g., ruts) and/or subsidence of the AA's substrate as a result of machinery, lives	stock, or off road vehicles			
changes not related directly to humans, e.g., beaver				
If any items were checked above, then for each row of the table below, assign points (3, 2, or 1) wetter water regime that still persists in the AA. To estimate that, contrast it with the condition if a automatically.	checked items never occurred	d or were no longer present. The su	um and final score will compute	
	Severe (3 points)	Medium (2 points)	Mild (1 point)	P
Spatial extent of resulting wetter condition	>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)	(
When most of AA's wetter condition began	<3 yrs ago	3-9 yrs ago	10-100 yrs ago	(
Score the following 2 rows only if the wetter conditions began within past 10 years, and only for the part of the AA that got wetter.				
Inundation now vs. previously	persistent vs. seldom	persistent vs. seasonal	slightly longer or more often	
Average water level increase	>1 ft	6-12"	<6 inches	(
* Score these 2 rows only for the part of the AA that got wetter, and only if the wetter conditions b	began within past 10 yrs		sum=	- (
0 if Sum= 0, (1 pt)	if Sum= 1-4. (2 pt) if 5-6. (3 p	ot) if 7-8. (4 pt) if 9-10. (5 pt) if >10.	. final score=	
Wetter Water Regime - External Causes				
In the last column, place an X next to any item occurring in the CA (including channels flowing more frequently, more deeply, and/or for longer duration than it would be without that item or acti CA includes all upstream areas of that river .				
subsidies from stormwater, wastewater effluent, septic system leakage, or irrigation water (dir	rect or via seepage)			Γ
pavement, ditches, or drain tile in the CA that incidentally increase the transport of water into	the AA			T
removal of timber or phreatophytes in the CA or along the AA's tributaries				Γ
removal of a water control structure or blockage in tributary upstream from the AA				
changes in the CA that are not related directly to humans, e.g., channel migration, landslides,				
If any items were checked above, then for each row of the table below, assign points (3, 2, or 1) wetter water regime in the AA. To estimate that, contrast it with the condition if checked items needs to be a structure of the table below.			those items in creating a	
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)	P
Spatial extent of resulting wetter condition	>20% of the AA	5-20% of the AA	<5% of the AA	(
When most of AA's wetter condition began	<3 yrs ago	3-9 yrs ago	10-100 yrs ago	(
Score the following 2 rows only if the wetter conditions began within past 10 years, and only for the part of the AA that got wetter.				
Inundation now vs. previously	persistent vs. seldom	persistent vs. seasonal	slightly longer or more often	Γ
Average water level increase	>1 ft	6-12"	<6 inches	(
* Score this row only for the part of the AA that got wetter, and only if the wetter conditions began	n within past 10 yrs		sum=	- (
0 if Sum= 0, (1 pt)	if Sum= 1-4. (2 pt) if 5-6. (3 p	ot) if 7-8. (4 pt) if 9-10. (5 pt) if >10.	final score=	-

In the last column, place and X next to any lem located within or immediately adjacent to the AA, that is likely to have caused a part of the AA to be inundated less extensively, less deeply, less frequently, address or drain lie in the AA or along its edge that accelerate outfor from the AA fraction is a set of the accelerate outfor from the AA fraction is a set of the accelerate outfor from the AA fraction is a set of the accelerate outfor from the AA fraction is a set of the accelerate outfor from the AA fraction is a set of the accelerate outfor from the AA fraction is a set of the AA fraction is a set of the accelerate outfor from the AA fraction is a set of th	Drier Water Regime - Internal Causes			-	
dithes of drain tie in the AA or along its edge that accelerate outflow from the AA lowering or enlargement of a surface water ext point (e.g., oulvert) or modification of a water level control structure, resulting in quicker drainage accelerated downoutting or channelization of an adjuscent or internal channel (out below the historical water kable level) deep ripping (e.g., with plows) that severs an underlying hydrologically-confining soil layer placement of fill material withdrawsis (e.g., pumping) of natural surface or ground water directly out of the AA (not its tributaries) R any items ware checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's resulting drier condition Severe (3 pis) Medum (2 pit) Mid (1 pit) Spatial extent of AA's drier condition began <3 yrs ago 3-9 yrs ago 10-100 yrs ago Score the following 2 cross only if the driver conditions began within past 10 years, and only for the AA that y of driver. seldom vs. previsiont seldom vs. previsiont seldom vs. previsiont 0 if Sum= 0, (1 pit if Sum= 14. (2 pit) if 5-6. (3 pit) if 7-8. (4 pit) if 9-10. (5 pit) if >10 final scores 0 if Sum= 0, (1 pit if Sum= 14. (2 pit) if 5-6. (3 pit) if 7-8. (4 pit) if 9-10. (5 pit) if >10 <	In the last column, place an X next to any item located within or immediately adjacent to	the AA, that is likely to have caused	d a part of the AA to be inundated	less extensively, less deeply,	
Severe (3 pts) Medium (2 pt) Mid (1 pt) Spatial extent of AA's resulting drier condition began <39 yrs ago 3-9 yrs ago 10 yrs yrs ago When most of AA's drier conditions began within past 10 years, and only for the art for all or the conditions began within past 10 years, and only for the art for all drier within the CA (including channels towing into the AA) that is likely to have caused a part of the AA to be inundated exers exert would otherwise reach the AA released to the drives with the drives within the CA (including channels towing into the AA) that is likely to have caused a part of the AA to be inundated exerts would otherwise reach the AA released to the AA's resulting drier condition began <39 yrs ago 3-9 yrs ago 10-100 yrs ago Store the following 2 rows only dthe drive condition to the AA (including channels towing in the drive condition began <3 yrs ago 3-9 yrs ago 10-100 yrs ago Of Sume 0, (1 pt) if Sume 14. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10 final scoree Sature Of Sume 0, (1 pt) if Sume 14. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10 final scoree Sature Of Sume 0, (1 pt) if Sume 14. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10 final scoree Of Sume 0, (1 pt) if Sume 14. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10 final scoree Of Sume 0, (1 pt) if Sume 14. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10 final s					-
accelerated downcutting or channelization of an adjacent or internal channel (cut below the historical water table level) deep ripping (4, ,, with plows) that severs an underlying hydrologically-confining soil layer placement of fill material withdrawals (e.g., pumping) of natural surface or ground water directly out of the AA (not fits tributaries) If any terms were checked above, then for each tow of the table below assign points (3, 2, or 1) in the tais column that describe the combined maximum effect of those items in creating a direr water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Severe (3 pis) Med (1 pi) Spatial extent of AA's resulting drier condition Severe (3 pis) Severe (4 pit) Severe (3 pis) Severe (6 pis) Sev		ater level control structure, resulting	n in quicker drainage		-
deep ripping (e.g., with plows) that severs an underlying hydrologically-confining soll layer placement of fill material withdrawals (e.g., pumping) of natural surface or ground water directly out of the AA (not its tributaries) If any items wee theological boxe, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's drier condition began >95% of AA or >59% of 1ts <5% of AA or 55% of its					┣
placement of fill meterial withdrawels (e.g., purpring) of natural surface or ground weter directly out of the AA (not its tributaries) if any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier varier regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's resulting drier condition >95% of AA or >95% of Its upland edge (if any) willed (1 pt) When most of AA's drier conditions began within past 10 years, and only for the AA that got drier. <3 yrs ago					┣
withdrawals (e.g., pumping) of natural surface or ground water directly out of the AA (not its thibutaries) If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's resulting drier condition >95% of AA or 595% of its upland edge (if any) Wild (1 pt) Spatial extent of AA's drier condition began <3 yrs ago		er			
If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier were regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spetial extent of AA's creating drier condition >95% of AA or >95% of its value (1 any) Midd (1 pt) Spetial extent of AA's drier condition began >95% of AA or >95% of its value (1 any) 0 Midd (1 any) When most of AA's drier condition began <3 yrs ago	•				
water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Severe (3 pts) Medium (2 pt) Mild (1 pt) Spatial extent of AA's resulting driar condition >95% of Aa or >95% of its upland edge (if any) 5-95% of AA or \$-95% of its upland edge (if any) >10-100 yrs ago Score the following 2 rows only if the driar conditions began within past 10 years, and only for the part of the AA that got driar. Imundation now vs. previously seldom vs. previsitent seasonal vs. pensistent seasonal vs. pensistent sightly shorter or less often Water Regime - External Causes >1 ft 6-12° <6 inches	withdrawals (e.g., pumping) of natural surface or ground water directly out of the AA (not	its tributaries)			
Spatial extent of AA's resulting drier condition >95% of AA or >95% of its upland edge (if any) <				those items in creating a drier	
upland edge (if any) upland edge (if any) upland edge (if any) upland edge (if any) When most of AA's drier condition began <3 yrs ago 3-9 yrs ago 10-100 yrs ago Score the following 2 rows only if the drier conditions began within past 10 years, and only for the part of the AA that got drier. seldom vs. previously		Severe (3 pts)	Medium (2 pt)	Mild (1 pt)	
When most of AA's drier condition began <3 yrs ago	Spatial extent of AA's resulting drier condition	>95% of AA or >95% of its	5-95% of AA or 5-95% of its	<5% of AA and <5% of its	0
Score the following 2 rows only if the drier conditions began within past 10 years, and only for the part of the AA that got drier. seldom vs. persistent seasonal vs. persistent seasonal vs. persistent Inundation now vs. previously seldom vs. persistent seasonal vs. persistent seasonal vs. persistent seasonal vs. persistent Water level decrease >1 ft 6-12" <6 inches		upland edge (if any)	upland edge (if any)	upland edge (if any)	
the part of the AA that got drier. Inumdation now vs. previously seldom vs. persistent seasonal vs. persistent seldom vs. persistent Water level decrease >1 ft 6-12" <6 inches	When most of AA's drier condition began	<3 yrs ago	3-9 yrs ago	10-100 yrs ago	0
Inundation now vs. previously seldom vs. persistent seasonal vs. persistent slightly shorter or less often Water level decrease >1 ft 6-12" <6 inches	Score the following 2 rows only if the drier conditions began within past 10 years, and only	for			
Water level decrease >1 ft 6-12" <6 inches	the part of the AA that got drier.				
0 if Sum= 0, (1 pt) if Sum= 1.4. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10. final score= 0 if Sum= 0, (1 pt) if Sum= 1.4. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10. final score= 0 if bum place an X next to any item within the CA (including channels flowing into the AA) that is likely to have caused a part of the AA to be inundated less extensively, less deeply, less frequently, and/or for shorter duration that it would be without those. a dam, dik, levee, weir, berm, or tidegate that interferes with natural inflow to the AA a dam, dik, levee, weir, berm, or tidegate that interferes with natural inflow to the AA relocation of natural irbutaries whose water would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals that divert water that would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals that divert water that would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA groundwater within the for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's free condition began >20% of the AA 5-20% of the AA <5% of the AA			•	<u> </u>	0
0 if Sum= 0, (1 pt) if Sum= 1.4. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10. final score= Drier Water Regime - External Causes In the last column, place an X next to any item within the CA (including channels flowing into the AA) that is likely to have caused a part of the AA to be inundated less extensively, less deeply, less frequently, and/or for shorter duration that it would be without those. a dam, dike, levee, weir, berm, or tidegate that interferes with natural inflow to the AA relocation of natural tributaries whose water would otherwise reach the AA instream water withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals that diver water that would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals that diver water that would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA groundwater with reactophytes (woody plants with deep roots and high transpiration, e.g., juniper, auturn olive) or crops with high transpiration rates that are near the AA changes not related directly to humans ff any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's re	Water level decrease	>1 ft	6-12"	<6 inches	0
4 Drier Water Regime - External Causes In the last column, place an X next to any item within the CA (including channels flowing into the AA) that is likely to have caused a part of the AA to be inundated less extensively, less deeply, less frequently, and/or for shorter duration that it would be without those. a dam, dike, levee, weir, berm, or tidegate that interferes with natural inflow to the AA relocation of natural tributaries whose water would otherwise reach the AA instream water withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA proliferation of phreatophytes (woody plants with deep roots and high transpiration, e.g., juniper, autumn olive) or crops with high transpiration rates that are near the AA changes not related directly to humans If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's resulting drier condition >20% of the AA 5-20% of the AA <5% of the AA Score the following 2 rows only if the drier conditions began within past 10 years, and only for the part of the AA that got drier. seldom vs. persistent seasonal vs. persistent slightly shorter or less often Water level decrease >1 ft					
In the last column, place an X next to any item within the CA (including channels flowing into the AA) that is likely to have caused a part of the AA to be inundated less extensively, less deeply, less frequently, and/or for shorter duration that it would be without those. a dam, dike, levee, weir, berm, or tidegate that interferes with natural inflow to the AA relocation of natural tributaries whose water would otherwise reach the AA instream water withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA proliferation of phreatophytes (woody plants with deep roots and high transpiration, e.g., juniper, autumn olive) or crops with high transpiration rates that are near the AA changes not related directly to humans If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Seate (3 pts) Medium (2 pts) Mild (1 pt) Spatial extent of AA's resulting drier condition Seate following 2 rows only if the drier conditions began within past 10 years, and only for the part of the AA that got drier. Inundation now vs. previously Water level decrease >1 ft 1-12" < 1 inch		Ι ρτ) It Sum= 1-4. (2 ρτ) It 5-6. (3 ρ	t) if 7-8. (4 pt) if 9-10. (3 pt) if >10	final score=	0
deeply, less frequently, and/or for shorter duration that it would be without those. a dam, dike, levee, weir, berm, or tidegate that interferes with natural inflow to the AA relocation of natural tributaries whose water would otherwise reach the AA instream water withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals from tributaries whose water would otherwise reach the AA proliferation of phreatophytes (woody plants with deep roots and high transpiration, e.g., juniper, autumn olive) or crops with high transpiration rates that are near the AA changes not related directly to humans If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's resulting drier condition >20% of the AA 5-20% of the AA Vhen most of AA;s drier condition began <3 yrs ago					
a dam, dike, levee, weir, berm, or tidegate that interferes with natural inflow to the AA relocation of natural tributaries whose water would otherwise reach the AA instream water withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals that divert water that would otherwise reach the AA proliferation of phreatophytes (woody plants with deep roots and high transpiration, e.g., juniper, autumn olive) or crops with high transpiration rates that are near the AA changes not related directly to humans If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Severe (3 pts) Medium (2 pts) Mild (1 pt) Spatial extent of AA's resulting drier condition began Score the following 2 rows only if the drier conditions began within past 10 years, and only for the part of the AA that got drier. Inundation now vs. previously Seldom vs. previously Seldom vs. persistent Seasonal vs. persistent Slightly shorter or less often Water level decrease >1 ft 1.12" <1 inch		to the AA) that is likely to have cau	sed a part of the AA to be inundate	ed less extensively, less	
relocation of natural tributaries whose water would otherwise reach the AA instream water withdrawals from tributaries whose water would otherwise reach the AA groundwater withdrawals that divert water that would otherwise reach the AA proliferation of phreatophytes (woody plants with deep roots and high transpiration, e.g., juniper, autumn olive) or crops with high transpiration rates that are near the AA changes not related directly to humans If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Spatial extent of AA's resulting drier condition >20% of the AA 5-20% of the AA Spatial extent of AA's resulting drier conditions began within past 10 years, and only for the part of the AA that got drier. Inundation now vs. previously seldom vs. persistent seasonal vs. persistent slightly shorter or less often Water level decrease >1 ft 1-12" <1 inch					-
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If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items in creating a drier water regime in the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Image: Severe (3 pts) Medium (2 pts) Mild (1 pt) Spatial extent of AA's resulting drier condition >20% of the AA 5-20% of the AA When most of AA;s drier condition began <3 yrs ago	changes not related directly to humans		• •		┢
Severe (3 pts) Medium (2 pts) Mild (1 pt) Spatial extent of AA's resulting drier condition >20% of the AA 5-20% of the AA Spatial extent of AA's resulting drier condition >20% of the AA 5-20% of the AA When most of AA;s drier condition began <3 yrs ago	If any items were checked above, then for each row of the table below assign points (3, 2, o	,		those items in creating a drier	
Spatial extent of AA's resulting drier condition >20% of the AA 5-20% of the AA <5% of the AA When most of AA;s drier condition began <3 yrs ago	water regime in the AA. To estimate that, contrast it with the condition if checked items nev	er occurred or were no longer pres	ent.		
When most of AA;s drier condition began <3 yrs ago 3-9 yrs ago 10-100 yrs ago Score the following 2 rows only if the drier conditions began within past 10 years, and only for the part of the AA that got drier. Inundation now vs. previously seldom vs. persistent seasonal vs. persistent slightly shorter or less often Water level decrease >1 ft 1-12" <1 inch sum=		Severe (3 pts)	Medium (2 pts)	(, , ,	
Score the following 2 rows only if the drier conditions began within past 10 years, and only for the part of the AA that got drier. Inundation now vs. previously seldom vs. persistent seasonal vs. persistent slightly shorter or less often Water level decrease >1 ft 1-12" <1 inch					0
the part of the AA that got drier. Inundation now vs. previously seldom vs. persistent seasonal vs. persistent slightly shorter or less often Water level decrease >1 ft 1-12" <1 inch			3-9 yrs ago	10-100 yrs ago	0
Inundation now vs. previously seldom vs. persistent seasonal vs. persistent slightly shorter or less often Water level decrease >1 ft 1-12" <1 inch		tor			
Water level decrease >1 ft 1-12" <1 inch					
sum=			•		0
	Water level decrease	>1 tt	1-12"		0
ILIT NUME ILITI ADDITI SUME 171 CONTULTS 6 CANTULT A ADDITION IN TANU TANU TANU TANU TANU TANU TANU TAN		1 nt) if Sum= 1.1 (2 nt) if 5.6 (2 n	h) if 7_8 (1 nt) if 0 10 (5 nt) if \10		

In the last column, place an X next to any item that is likely to have caused the timing of water i muted (smaller or less frequent peaks spread over longer times, more temporal homogeneity or		· · ·	-
flow regulation in tributaries or water level regulation in adjoining water body, or tidegate or of	ther control structure at water	entry points that regulates inflow to	the AA
increased pavement and other impervious surface in the CA			
straightening, ditching, dredging, and/or lining of tributary channels in the CA			
discharges of irrigation water to the AA, applied at times when natural runoff typically is not si	ignificant		
	ignineant		
other			
If any items were checked above, then for each row of the table below assign points (3, 2, or 1) water inputs to the AA. To estimate that, contrast it with the condition if checked items never oc			those items on the timing of
			Mild (1 pt)
Or stiel subort within the AA of timing shift	Severe (3 pts) >95% of AA	Medium (2 pts) 5-95% of AA	Mild (1 pt)
Spatial extent within the AA of timing shift			<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 if Sum= 0, (1 pt)	if Sum= 1-4. (2 pt) if 5-6. (3 p	t) if 7-8. (4 pt) if 9-10. (5 pt) if >10.	final score=
Accelerated Inputs of Nutrients, Contaminants, and/or Salts In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs	ikely to have accelerated the in	nputs of nutrients, contaminants, or	salts to the AA
In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot	t applications for controlling no	·	salts to the AA
In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries	t applications for controlling no	·	salts to the AA
In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot	t applications for controlling no	·	salts to the AA
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In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries artificial drainage of upslope lands reflooding of soils that had been dry for many years fire retardants from aerial firefighting oil or chemical spills (not just chronic inputs) from nearby roads erosion of nutrient-rich or contaminated soils chemical wastes from mining, oil/ gas extraction, other industrial sources	t applications for controlling no	·	salts to the AA
In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries artificial drainage of upslope lands reflooding of soils that had been dry for many years fire retardants from aerial firefighting oil or chemical spills (not just chronic inputs) from nearby roads erosion of nutrient-rich or contaminated soils chemical wastes from mining, oil/ gas extraction, other industrial sources other human-related disturbances within the CA	applications for controlling no	n-natives in the AA	salts to the AA
In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries artificial drainage of upslope lands reflooding of soils that had been dry for many years fire retardants from aerial firefighting oil or chemical spills (not just chronic inputs) from nearby roads erosion of nutrient-rich or contaminated soils chemical wastes from mining, oil/ gas extraction, other industrial sources other human-related disturbances within the CA	applications for controlling no	n-natives in the AA	
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In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries artificial drainage of upslope lands reflooding of soils that had been dry for many years fire retardants from aerial firefighting oil or chemical spills (not just chronic inputs) from nearby roads erosion of nutrient-rich or contaminated soils chemical wastes from mining, oil/ gas extraction, other industrial sources other human-related disturbances within the CA sources not related directly to humans, e.g., fire, extensive cover of nitrogen-fixing plants (e.g. If any items were checked above, then for each row of the table below assign points (3, 2, or 1)	applications for controlling no s g., alder), concentrations of wa	n-natives in the AA terbirds or other wildlife e the combined maximum effect of	those items in generating
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In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries artificial drainage of upslope lands reflooding of soils that had been dry for many years fire retardants from aerial firefighting oil or chemical spills (not just chronic inputs) from nearby roads erosion of nutrient-rich or contaminated soils chemical wastes from mining, oil/ gas extraction, other industrial sources other human-related disturbances within the CA sources not related directly to humans, e.g., fire, extensive cover of nitrogen-fixing plants (e.g. If any items were checked above, then for each row of the table below assign points (3, 2, or 1) loads of nutrients, contaminants, or salts reaching the AA. To estimate that, contrast it with the	applications for controlling no applications for controlling n	n-natives in the AA terbirds or other wildlife e the combined maximum effect of er occurred or were no longer prese Medium (2 pts) domestic effluent, cropland, or	those items in generating ent. Mild (1 pt) mildly impacting (livestock,
In the last column, place an X next to any item occurring in either the AA or its CA that is li stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries artificial drainage of upslope lands reflooding of soils that had been dry for many years fire retardants from aerial firefighting oil or chemical spills (not just chronic inputs) from nearby roads erosion of nutrient-rich or contaminated soils chemical wastes from mining, oil/ gas extraction, other industrial sources other human-related disturbances within the CA sources not related directly to humans, e.g., fire, extensive cover of nitrogen-fixing plants (e.g. If any items were checked above, then for each row of the table below assign points (3, 2, or 1) loads of nutrients, contaminants, or salts reaching the AA. To estimate that, contrast it with the or Usual toxicity of most toxic contaminants	g., alder), concentrations of wa in the last column that describ condition if checked items nev Severe (3 pts) industrial effluent or 303d* for toxics	n-natives in the AA terbirds or other wildlife e the combined maximum effect of er occurred or were no longer prese Medium (2 pts) domestic effluent, cropland, or 303d for nutrients	those items in generating ent. Mild (1 pt) mildly impacting (livestock, pets, low density residential) infrequent & during high
In the last column, place an X next to any item occurring in either the AA or its CA that is in stormwater or wastewater effluent (including failing septic systems), landfills irrigation water discharges into the AA, including saline seeps livestock, dogs fertilizers applied to lawns, ag lands, or other areas in the CA pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding spot dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tributaries artificial drainage of upslope lands reflooding of soils that had been dry for many years fire retardants from aerial firefighting oil or chemical spills (not just chronic inputs) from nearby roads erosion of nutrient-rich or contaminated soils chemical wastes from mining, oil/ gas extraction, other industrial sources other human-related disturbances within the CA sources not related directly to humans, e.g., fire, extensive cover of nitrogen-fixing plants (e.g. If any items were checked above, then for each row of the table below assign points (3, 2, or 1) loads of nutrients, contaminants, or salts reaching the AA. To estimate that, contrast it with the or Usual toxicity of most toxic contaminants	applications for controlling no applications of wa applications of wa applications of wa applications of wa applications for controlling no applications for controlling no applications for controlling no applications of wa applications of wa applications of wa applications for controlling no applications of wa applications for controlling no applications for controlling no applic	n-natives in the AA terbirds or other wildlife terbirds	those items in generating ent.

S7 Excessive Sediment Loading from Contributing Area				
In the last column, place an X next to any item present in the CA that is likely to have elev	rated the load of waterborne or wind	borne sediment reaching the AA fro	m its CA.	
erosion from plowed fields, fill, timber harvest, dirt roads, vegetation clearing, fires				
erosion from construction, in-channel machinery in the CA				
erosion from off-road vehicles in the CA				
erosion from livestock or foot traffic in the CA				
stormwater or wastewater effluent				
sediment from 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 CA				
natural processes within the CA, e.g., streambank erosion, landslides, erosion of erosio				
If any items were checked above, then for each row of the table below assign points (3, 2,			hose items in increasing the	
amount or transport of sediment into the AA. To estimate that, contrast it with the conditio				
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)	
Erosion in CA	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 CA	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 & during high runoff events mainly	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-i		e or no apparent erosion or	sum=	0
disturbance of soil or sediment	, , ,			
0 if Sum= 0,	(1 pt) if Sum= 1-4. (2 pt) if 5-6. (3	pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10.	final score=	0
^{S8} Soil or Sediment Alteration <i>Within the Assessment Area</i>				
In the last column, place an X next to any item present in the AA that is likely to have com	pacted, eroded, or otherwise altered	d the AA's soil		
compaction from machinery, off-road vehicles, or mountain bikes, especially during we	etter periods			
leveling or other grading not to the natural contour	·			
tillage, plowing (but excluding disking for enhancement of native plants)				
fill or riprap, excluding small amounts of upland soils containing organic amendments ((compost, etc.) or small amounts of	topsoil imported from another wetlan	d	
livestock and other sediment- or soil-disturbing animals, e.g., carp, nutria, wild boar, pe	eople on foot			
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				
artificial water level or flow manipulations sufficient to cause erosion or stir bottom sedi	ments			
natural processes within the AA, e.g., trampling by concentrated wildlife, shore or strea	ambank erosion, landslides, normal	erosion of erosion-prone soils espec	ially following fire, floods.	
If any items were checked above, then for each row of the table below assign points (3, 2, AA's soils. To estimate that, contrast it with the soil condition if checked items never occu		be the combined maximum effect of t	those items in altering the	
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)	
Spatial extent of altered soil	>95% of AA or >95% of its	,	<5% of AA and <5% of its	0
	upland edge (if any)	upland edge (if any)	upland edge (if any)	
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
0 if Sum= 0,	(1 pt) if Sum= 1-4. (2 pt) if 5-6. (3	pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10.	final score=	0

In the last column, place an X next to any item present in the AA that species composition (not total cover or biomass) changed, do not che		less vegetation biomass, or less woo	o generally. It only the
clearing, logging, excepting removal of woody vegetation from nat			
grazing by livestock	-		
mowing			
herbicides, excepting spot applications for controlling non-native p	lants in the AA		
plowing, regrading			
removal of woody debris			
shading from large artificial structure, e.g., bridge, boardwalk, docl	(
other human-related disturbances within the AA natural processes concentrated within the AA, e.g., wind & wave s geese.	couring, windthrow, insect or disease infestations, fires,	beaver damage, natural erosion, inte	nsive grazing by deer, elk,
natural processes concentrated within the AA, e.g., wind & wave s geese. If any items were checked above, then for each row of the table below	-	-	
natural processes concentrated within the AA, e.g., wind & wave s geese. If any items were checked above, then for each row of the table below	-	-	
natural processes concentrated within the AA, e.g., wind & wave s geese. If any items were checked above, then for each row of the table below vegetation cover in the AA.	v assign points (3, 2, or 1) in the last column that describ Severe (3 pts)	be the combined maximum effect of the	nose items on the amount o Mild (1 pt)
natural processes concentrated within the AA, e.g., wind & wave s geese. If any items were checked above, then for each row of the table below vegetation cover in the AA. Spatial extent of veg removal	v assign points (3, 2, or 1) in the last column that describ Severe (3 pts) >95% of AA or >95% of its	be the combined maximum effect of the Medium (2 pts) 5-95% of AA or 5-95% of its water edge	nose items on the amount o Mild (1 pt) <5% of AA and <5% of its
natural processes concentrated within the AA, e.g., wind & wave s	v assign points (3, 2, or 1) in the last column that describ Severe (3 pts) >95% of AA or >95% of its water edge regularly during most of the	be the combined maximum effect of the Medium (2 pts) 5-95% of AA or 5-95% of its water edge	nose items on the amount of Mild (1 pt) <5% of AA and <5% of its water edge if any