

Disclaimer

This report was commissioned by the Ecosystem-Based Management Working Group (EBM WG) to provide information to support full implementation of EBM. The conclusions and recommendations in this report are exclusively the authors', and may not reflect the values and opinions of EBM WG members.

Tables of Monitoring Priorities (December 2008)

prepared for
Ecosystem Based Management Working Group

by
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Key to Tables of Monitoring Priorities

Column Heading	Description of Heading and Contents of Column
Goal	goal stated in land-use plan.
Objective	objective stated in land use plan.
Indicator	indicator stated or indicator derived from strategy stated in land use plan.
Scope	geographic area to which objective and indicator apply (see Table of scope codes below).
Goal Uncertainty	uncertainty about achieving goal even if objectives are achieved: high uncertainty usually indicates that external factors influence goal (H igh, M edium, L ow).
Importance Score	
Goal Influence	the degree of influence that a goal has on other goals (3 influences ≥ 4 goals, 2 influences 2 or 3 goals, 1 influences ≤ 1 goal).

Objective Influence	for a given goal, some objectives influence the goal more than others (3=high influence, 2=medium, 1=low).
Recovery Period	lag time for objective to recover after negative impacts cease (3=recovery > 100 yr, 2=recovery ranges from 10 to 100 yr, 1=recovery < 10 yr).
Strategy Influence	for a given objective, some strategies influence the goal more than others (3=high influence, 2=medium, 1=low).
Importance Score	variable used to rank monitoring topics within priority classes (see below); calculated as the sum of goal influence, objective influence and recovery period; objectives with higher importance scores have higher priority for monitoring.

Collect Data

Current Priority	priority for collecting current indicator data; 1 = data do not exist and cannot be estimated, 2 = data do not exist but can be estimated, ✓ = data exist (smaller numbers indicate higher priority).
Ease of collecting data	Easy, Moderate, Difficult, Very Difficult.
Future Priority	priority for setting indicator targets; 1 = targets do not exist and future state cannot be estimated, 2 = targets do not exist but future state can be estimated, ✓ = targets exist (smaller numbers indicate higher priority).

Probability of Success ± Uncertainty

Current P(S) ± U	current probability of success (Low, Medium, High) and uncertainty (Low, Medium, High).
Future P(S) ± U	future probability of success (Low, Medium, High) and uncertainty (Low, Medium, High).

Reduce Uncertainty

Current Priority	priority for reducing uncertainty around current risk estimate (1=high, 2=medium, 3=low), based on current R ± U (see Framework).
Future Priority	priority for reducing uncertainty around future risk estimate (1=high, 2=medium, 3=low), based on future R ± U (see Framework).
Overall Priority	combined current and future priority for reducing uncertainty around risk curve (1=high, 2=medium, 3=low, 4=very low); weights future priority more.
Ease of Monitoring	Easy, Moderate, Difficult, Very Difficult, Not Resolvable.

Detect Consequences

Current Priority	priority for detecting consequences on current landscape (1=high, 2=medium, 3=low), based on current R ± U (see Framework).
Future Priority	priority for detecting consequences on future landscape (1=high, 2=medium, 3=low), based on future R ± U (see Framework).
Overall Priority	combined current and future priority for detecting consequences (1=high, 2=medium, 3=low, 4=very low); weights current priority more.
Ease of Monitoring	Easy, Moderate, Difficult, Very Difficult, Not Resolvable.

Codes Describing Geographic Scope

Codes	Description of Codes
NCC	North and Central Coast
SCC	South Central Coast
uncommon	uncommon ecosystems with 70% of RONV target
common	common ecosystems with 30% of RONV target
common; not \$	common ecosystems with 30% of RONV target, but unlikely to be harvested due to economics

Goal	Objective	Indicator	Abbreviation		
Maintain hydroriparian ecological integrity	Maintain water quantity	Dams, diversions, channels and dykes	Hydroriparian EI Water quantity (flow) Diversions ECA in fish WS ECA in non-fish WS		
		Equivalent clearcut area in important fisheries watersheds			
		Equivalent clearcut area in non-important fisheries watersheds			
	Maintain Channel Characteristics (Including Stream Morphology, Bank Stability and Downed Wo Channel Characteristics and Water Quality Within Range of Natural Variability	% active fluvial units reserved including buffer		% retention: fluvial	
		% wetlands reserved including buffer		% retention: wetland	
		% of natural riparian forest buffer in transportation and deposition zones		% retention: transport/deposition	
		% of potentially unstable terrain harvested		% unstable developed	
		% of natural riparian forest around small steep streams with high potential for debris transport		% retention: debris streams	
		% of source zone with functional riparian forest		% source zone > 30 yr pollutants	
		level of water pollutants			
Maintain Hydroriparian Biodiversity and Productivity: Coarse Filter	% reduction in natural riparian forest in buffer around each hydroriparian ecosystem	Hydroriparian biodiversity % retention: estuaries % retention: floodplains % retention: fans % retention: karst % retention: med streams w fish % retention: debris streams % retention: distinct streams % retention: other streams % retention: ocean spray % retention: lakes % retention: wetlands % retention: forested swamps % retention: bogs % retention: fens			
	<ul style="list-style-type: none"> • estuaries, • floodplains, • fans, • karst, • streams > 1.5 m with fish, • small (1 - 3 m) steep (>20%) streams/gullies with high susceptibility to debris flow, • small steep streams/gullies with distinct microclimate, • other streams, • ocean spray forest, • lakes, • wetlands, • forested swamps, • bogs, • fens 				
	Protect and Sustain High-value Fish Habitat: Fine Filter		% natural riparian forest within 1.5 tree heights around high-value fish habitat;	Valuable fish habitat % retention: HVFH % cut in small watersheds	
			% of watershed harvested in 3 years in small watersheds.		
	Hydriparian biodiversity--connectivity		<ul style="list-style-type: none"> • % of streams with natural cover along their entire length within process zones 	Riparian Connectivity % natural corridors	
	Maintain Terrestrial Ecological Integrity		Maintain the Natural Diversity of Species, Ecosystems and Seral Stages	% of natural abundance of old forest per ecosystem type	Terrestrial EI Ecosystem Representation % old % mid % young Rare ecosystems % of red % of blue % of non-listed Focal species % of critical habitat % of key corridors Stand structure % retention % in block Tree species mix % of species
				% of mid-seral forest in each ecosystem type	
				% of early-seral forest in each ecosystem type	
			Protect known red- and blue-listed and regionally rare ecosystems	% of known red-listed plant communities protected	
				% of known blue-listed plant communities protected	
				% of known non-listed, naturally rare ecosystems protected	
			Maintain Adequate Habitat to Maintain Healthy Populations of Red- and Blue-listed and Focal Sp	% of critical habitat of red- and blue-listed and focal wildlife species protected	
% of key wildlife migration/movement corridors protected					
Retain Forest Structure and Diversity at the Stand Level		% of cutblock retained as standing trees, within and adjacent to clearcuts or within partial cuts			
		% of retained standing trees that occur within cutblock boundaries in cutblocks larger than 15 ha			
Maintain a Natural Tree Species Mix	% of natural occurrence of each tree species in managed early seral forest protected				

Raw data used to determine monitoring priorities				Secondary Score							Prob. of Success									
				Goal Unc	Goal Infl	Objective	Recovery	Strategy	Secondary	Planning	Current	Ease of C	Current	± Uncertainty	Reduce Uncertainty	Detect Consequences				
Goal	Objective	Indicator	Scope																	
Terrestrial EI	Ecosystem Representa	% old	uncommon	M	3	3	3	9	✓	✓	?	L ± L	-	3	4	-	1	2		
Terrestrial EI	Ecosystem Representa	% old	common	M	3	3	3	9	✓	✓	?	H ± H	-	1		-	2			
Terrestrial EI	Ecosystem Representa	% old	common; not	M	3	3	3	9	✓	✓	?	H ± L	-	3		-	3			
Terrestrial EI	Ecosystem Representa	% mid	NCC, SCC	M	3	2	1	6	1	2	?	?	-	-		-	-			
Terrestrial EI	Ecosystem Representa	% young	NCC, SCC	M	3	1	1	5	1	2	?	?	-	-		-	-			
Terrestrial EI	Rare Ecosystems	% of red	NCC, SCC	M	2	3	3	8	✓	1	?	H ± H	1	1		-	2			
Terrestrial EI	Rare Ecosystems	% of blue	NCC, SCC	M	2	3	2	7	✓	1	?	H ± H	1	1		-	2			
Terrestrial EI	Rare Ecosystems	% of non-listed	NCC, SCC	M	2	3	2.5	7.5	1	1	?	L ± H	1	1		-	2			
Terrestrial EI	Focal Species	% of critical habitat	NCC, SCC	M	2	2	3	7	1	1	?	L ± H	1	1		-	2			
Terrestrial EI	Salvage	% of key corridors	NCC, SCC	M	2	2	2	6	1	1	?	L ± H	1	1		-	2			
Terrestrial EI	Stand structure	% retention	NCC, SCC	M	2	3	3	8	✓	1	?	L ± L	3	3		-	1			
Terrestrial EI	Stand structure	% in block	NCC, SCC	M	2	3	2	7	✓	1	?	L ± M	2	2		-	1			
Terrestrial EI	Tree species diversity	% of species	NCC, SCC	M	1	2	3	6	1	1	?	?	-	-		-	-			
Hydroriparian I	Water quantity (flow)	ECA in Fish WS	NCC, SCC	M	2	2	3	7	✓	1	?	H ± L	3	3		-	3			
Hydroriparian I	Water quantity (flow)	ECA in Non-Fish WS	NCC, SCC	M	2	2	3	7	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Channel morphology	% riparian: fluvial	NCC	L	3	2	3	8	✓	1	?	H ± L	3	3		-	3			
Hydroriparian I	Channel morphology	% riparian: fluvial	SCC	L	3	2	3	8	✓	1	?	L ± L	3	3		-	1			
Hydroriparian I	Channel morphology	% riparian: wetland	NCC, SCC	L	3	2	1	6	✓	1	?	H ± L	3	3		-	3			
Hydroriparian I	Channel morphology	% riparian: transport/deposition	NCC, SCC	L	3	2	2	7	✓	1	?	H ± L	3	3		-	3			
Hydroriparian I	Channel morphology	% unstable developed	NCC, SCC	L	3	2	3	8	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Channel morphology	% riparian: debris streams	NCC, SCC	L	3	2	2	7	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Channel morphology	% source zone > 30 yr	NCC, SCC	L	3	2	2	7	✓	1	?	H ± L	3	3		-	3			
Hydroriparian I	Channel morphology	pollutants	NCC, SCC	L	3	2	3	8	1	1	?	?	-	-		-	-			
Hydroriparian I	Hydroriparian biodivers	% riparian: estuaries	NCC	L	3	2.5	3	8.5	✓	1	?	H ± M	2	2		-	3			
Hydroriparian I	Hydroriparian biodivers	% riparian: estuaries	SCC	L	3	2.5	3	8.5	✓	1	?	M ± M	1	1		-	2			
Hydroriparian I	Hydroriparian biodivers	% riparian: floodplains	NCC, SCC	L	3	2.5	2	7.5	✓	1	?	H ± M	2	2		-	3			
Hydroriparian I	Hydroriparian biodivers	% riparian: fans	NCC, SCC	L	3	2.5	2	7.5	✓	1	?	H ± M	2	2		-	3			
Hydroriparian I	Hydroriparian biodivers	% riparian: karst	NCC, SCC	L	3	2.5	3	8.5	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Hydroriparian biodivers	% riparian: med streams w fish	NCC, SCC	L	3	2.5	1	6.5	✓	1	?	H ± M	2	2		-	3			
Hydroriparian I	Hydroriparian biodivers	% riparian: debris streams	NCC, SCC	L	3	2.5	3	8.5	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Hydroriparian biodivers	% riparian: distinct streams	NCC, SCC	L	3	2.5	2	7.5	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Hydroriparian biodivers	% riparian: other streams	NCC, SCC	L	3	2.5	1	6.5	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Hydroriparian biodivers	% riparian: ocean spray	NCC, SCC	L	3	2.5	1	6.5	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Hydroriparian biodivers	% riparian: lakes	NCC, SCC	L	3	2.5	1	6.5	✓	1	?	H ± L	3	3		-	3			
Hydroriparian I	Hydroriparian biodivers	% riparian: wetlands	NCC, SCC	L	3	2.5	1	6.5	✓	1	?	H ± L	3	3		-	3			
Hydroriparian I	Hydroriparian biodivers	% riparian: forested swamps	NCC, SCC	L	3	2.5	2	7.5	✓	1	?	H ± M	2	2		-	3			
Hydroriparian I	Hydroriparian biodivers	% riparian: bogs	NCC, SCC	L	3	2.5	1	6.5	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Hydroriparian biodivers	% riparian: fens	NCC, SCC	L	3	2.5	1	6.5	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Valuable fish habitat	% riparian: HVFH	NCC, SCC	L	1	3	3	7	✓	1	?	H ± M	2	2		-	3			
Hydroriparian I	Valuable fish habitat	% cut in small watersheds	NCC, SCC	L	1	3	2	6	1	1	?	L ± H	1	1		-	2			
Hydroriparian I	Riparian Connectivity	% natural corridors	NCC, SCC	L	1	2	3	6	1	1	?	L ± H	1	1		-	2			

Priority to set targets				Secondary Score						
Goal	Objective	Indicator	Scope	Goal Unce	Goal Influc	(bigger # = higher priority)				
						Objective I	Recovery I	Strategy in	Secondary	Planning p.
Hydroriparian EI	Hydroriparian biodiversity	% riparian: karst	NCC, SCC			3	2.5	3	8.5	1
Hydroriparian EI	Hydroriparian biodiversity	% riparian: debris streams	NCC, SCC			3	2.5	3	8.5	1
Hydroriparian EI	Channel morphology	% unstable developed	NCC, SCC			3	2	3	8	1
Hydroriparian EI	Channel morphology	pollutants	NCC, SCC			3	2	3	8	1
Hydroriparian EI	Hydroriparian biodiversity	% riparian: distinct streams	NCC, SCC			3	2.5	2	7.5	1
Terrestrial EI	Rare Ecosystems	% of non-listed	NCC, SCC			2	3	2.5	7.5	1
Hydroriparian EI	Channel morphology	% riparian: debris streams	NCC, SCC			3	2	2	7	1
Terrestrial EI	Focal Species	% of critical habitat	NCC, SCC			2	2	3	7	1
Hydroriparian EI	Water quantity (flow)	ECA in Non-Fish WS	NCC, SCC			2	2	3	7	1
Hydroriparian EI	Hydroriparian biodiversity	% riparian: other streams	NCC, SCC			3	2.5	1	6.5	1
Hydroriparian EI	Hydroriparian biodiversity	% riparian: ocean spray	NCC, SCC			3	2.5	1	6.5	1
Hydroriparian EI	Hydroriparian biodiversity	% riparian: bogs	NCC, SCC			3	2.5	1	6.5	1
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fens	NCC, SCC			3	2.5	1	6.5	1
Terrestrial EI	Ecosystem Representation	% mid	NCC, SCC			3	2	1	6	1
Hydroriparian EI	Riparian Connectivity	% natural corridors	NCC, SCC			1	2	3	6	1
Terrestrial EI	Salvage	% of key corridors	NCC, SCC			2	2	2	6	1
Terrestrial EI	Tree species diversity	% of species	NCC, SCC			1	2	3	6	1
Hydroriparian EI	Valuable fish habitat	% cut in small watersheds	NCC, SCC			1	3	2	6	1
Terrestrial EI	Ecosystem Representation	% young	NCC, SCC			3	1	1	5	1
Terrestrial EI	Ecosystem Representation	% old	uncommon			3	3	3	9	✓
Terrestrial EI	Ecosystem Representation	% old	common			3	3	3	9	✓
Terrestrial EI	Ecosystem Representation	% old	common; not \$			3	3	3	9	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	NCC			3	2.5	3	8.5	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	SCC			3	2.5	3	8.5	✓
Hydroriparian EI	Channel morphology	% riparian: fluvial	NCC			3	2	3	8	✓
Hydroriparian EI	Channel morphology	% riparian: fluvial	SCC			3	2	3	8	✓
Terrestrial EI	Rare Ecosystems	% of red	NCC, SCC			2	3	3	8	✓
Terrestrial EI	Stand structure	% retention	NCC, SCC			2	3	3	8	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: floodplains	NCC, SCC			3	2.5	2	7.5	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fans	NCC, SCC			3	2.5	2	7.5	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: forested swamps	NCC, SCC			3	2.5	2	7.5	✓
Hydroriparian EI	Channel morphology	% riparian: transport/deposition	NCC, SCC			3	2	2	7	✓
Hydroriparian EI	Channel morphology	% source zone > 30 yr	NCC, SCC			3	2	2	7	✓
Terrestrial EI	Rare Ecosystems	% of blue	NCC, SCC			2	3	2	7	✓
Terrestrial EI	Stand structure	% in block	NCC, SCC			2	3	2	7	✓
Hydroriparian EI	Valuable fish habitat	% riparian: HVFH	NCC, SCC			1	3	3	7	✓
Hydroriparian EI	Water quantity (flow)	ECA in Fish WS	NCC, SCC			2	2	3	7	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: med streams w fish	NCC, SCC			3	2.5	1	6.5	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: lakes	NCC, SCC			3	2.5	1	6.5	✓
Hydroriparian EI	Hydroriparian biodiversity	% riparian: wetlands	NCC, SCC			3	2.5	1	6.5	✓
Hydroriparian EI	Channel morphology	% riparian: wetland	NCC, SCC			3	2	1	6	✓

Priority to collect data					Secondary Score							
Goal	Objective	Indicator	Scope		Goal Unct	Goal Infl	(bigger # = higher priority)				Current F	Ease of C
							Objective	Recovery	Strategy i	Secondary		
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	NCC				3	2.5	3	8.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	SCC				3	2.5	3	8.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: karst	NCC, SCC				3	2.5	3	8.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: debris streams	NCC, SCC				3	2.5	3	8.5	1	
Hydroriparian EI	Channel morphology	% riparian: fluvial	NCC				3	2	3	8	1	
Hydroriparian EI	Channel morphology	% riparian: fluvial	SCC				3	2	3	8	1	
Hydroriparian EI	Channel morphology	% unstable developed	NCC, SCC				3	2	3	8	1	
Hydroriparian EI	Channel morphology	pollutants	NCC, SCC				3	2	3	8	1	
Terrestrial EI	Rare Ecosystems	% of red	NCC, SCC				2	3	3	8	1	
Terrestrial EI	Stand structure	% retention	NCC, SCC				2	3	3	8	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: floodplains	NCC, SCC				3	2.5	2	7.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fans	NCC, SCC				3	2.5	2	7.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: distinct streams	NCC, SCC				3	2.5	2	7.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: forested swamps	NCC, SCC				3	2.5	2	7.5	1	
Terrestrial EI	Rare Ecosystems	% of non-listed	NCC, SCC				2	3	2.5	7.5	1	
Hydroriparian EI	Channel morphology	% riparian: transport/deposit	NCC, SCC				3	2	2	7	1	
Hydroriparian EI	Channel morphology	% riparian: debris streams	NCC, SCC				3	2	2	7	1	
Hydroriparian EI	Channel morphology	% source zone > 30 yr	NCC, SCC				3	2	2	7	1	
Terrestrial EI	Focal Species	% of critical habitat	NCC, SCC				2	2	3	7	1	
Terrestrial EI	Rare Ecosystems	% of blue	NCC, SCC				2	3	2	7	1	
Terrestrial EI	Stand structure	% in block	NCC, SCC				2	3	2	7	1	
Hydroriparian EI	Valuable fish habitat	% riparian: HVFH	NCC, SCC				1	3	3	7	1	
Hydroriparian EI	Water quantity (flow)	ECA in Fish WS	NCC, SCC				2	2	3	7	1	
Hydroriparian EI	Water quantity (flow)	ECA in Non-Fish WS	NCC, SCC				2	2	3	7	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: med streams w fi	NCC, SCC				3	2.5	1	6.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: other streams	NCC, SCC				3	2.5	1	6.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: ocean spray	NCC, SCC				3	2.5	1	6.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: lakes	NCC, SCC				3	2.5	1	6.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: wetlands	NCC, SCC				3	2.5	1	6.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: bogs	NCC, SCC				3	2.5	1	6.5	1	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fens	NCC, SCC				3	2.5	1	6.5	1	
Hydroriparian EI	Channel morphology	% riparian: wetland	NCC, SCC				3	2	1	6	1	
Hydroriparian EI	Riparian Connectivity	% natural corridors	NCC, SCC				1	2	3	6	1	
Terrestrial EI	Salvage	% of key corridors	NCC, SCC				2	2	2	6	1	
Terrestrial EI	Tree species diversity	% of species	NCC, SCC				1	2	3	6	1	
Hydroriparian EI	Valuable fish habitat	% cut in small watersheds	NCC, SCC				1	3	2	6	1	
Terrestrial EI	Ecosystem Representatic	% mid	NCC, SCC				3	2	1	6	2	
Terrestrial EI	Ecosystem Representatic	% young	NCC, SCC				3	1	1	5	2	
Terrestrial EI	Ecosystem Representatic	% old	uncommon				3	3	3	9	✓	
Terrestrial EI	Ecosystem Representatic	% old	common				3	3	3	9	✓	
Terrestrial EI	Ecosystem Representatic	% old	common; not \$				3	3	3	9	✓	

Prob. of Success													
Priority to reduce uncertainty				Secondary		Planning p		Priority to		± Uncertainty		Reduce Uncertainty	
Goal	Objective	Indicator	Scope	Secondary	Planning p	Priority to	Current P ₁	Future P ₅	Current P ₁	Future P ₁	Overall P ₇	Ease of Me	
Terrestrial EI	Ecosystem Representation	% old	common	9	✓	✓	?	H ± H	-	1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	SCC	8.5	✓	1	?	M ± M	-	1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: karst	NCC, SCC	8.5	1	1	?	L ± H		1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: debris streams	NCC, SCC	8.5	1	1	?	L ± H		1			
Hydroriparian EI	Channel morphology	% unstable developed	NCC, SCC	8	1	1	?	L ± H		1			
Terrestrial EI	Rare Ecosystems	% of red	NCC, SCC	8	✓	1	?	H ± H		1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: distinct streams	NCC, SCC	7.5	1	1	?	L ± H		1			
Terrestrial EI	Rare Ecosystems	% of non-listed	NCC, SCC	7.5	1	1	?	L ± H		1			
Hydroriparian EI	Channel morphology	% riparian: debris streams	NCC, SCC	7	1	1	?	L ± H		1			
Terrestrial EI	Focal Species	% of critical habitat	NCC, SCC	7	1	1	?	L ± H		1			
Terrestrial EI	Rare Ecosystems	% of blue	NCC, SCC	7	✓	1	?	H ± H		1			
Hydroriparian EI	Water quantity (flow)	ECA in Non-Fish WS	NCC, SCC	7	1	1	?	L ± H		1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: other streams	NCC, SCC	6.5	1	1	?	L ± H		1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: ocean spray	NCC, SCC	6.5	1	1	?	L ± H		1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: bogs	NCC, SCC	6.5	1	1	?	L ± H		1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fens	NCC, SCC	6.5	1	1	?	L ± H		1			
Hydroriparian EI	Riparian Connectivity	% natural corridors	NCC, SCC	6	1	1	?	L ± H		1			
Terrestrial EI	Salvage	% of key corridors	NCC, SCC	6	1	1	?	L ± H		1			
Hydroriparian EI	Valuable fish habitat	% cut in small watersheds	NCC, SCC	6	1	1	?	L ± H		1			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	NCC	8.5	✓	1	?	H ± M		2			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: floodplains	NCC, SCC	7.5	✓	1	?	H ± M		2			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fans	NCC, SCC	7.5	✓	1	?	H ± M		2			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: forested swamps	NCC, SCC	7.5	✓	1	?	H ± M		2			
Terrestrial EI	Stand structure	% in block	NCC, SCC	7	✓	1	?	L ± M		2			
Hydroriparian EI	Valuable fish habitat	% riparian: HVFH	NCC, SCC	7	✓	1	?	H ± M		2			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: med streams w fish	NCC, SCC	6.5	✓	1	?	H ± M		2			
Terrestrial EI	Ecosystem Representation	% old	uncommon	9	✓	✓	?	L ± L	-	3	4		
Terrestrial EI	Ecosystem Representation	% old	common; not \$	9	✓	✓	?	H ± L	-	3			
Hydroriparian EI	Channel morphology	% riparian: fluvial	NCC	8	✓	1	?	H ± L		3			
Hydroriparian EI	Channel morphology	% riparian: fluvial	SCC	8	✓	1	?	L ± L		3			
Terrestrial EI	Stand structure	% retention	NCC, SCC	8	✓	1	?	L ± L		3			
Hydroriparian EI	Channel morphology	% riparian: transport/deposition	NCC, SCC	7	✓	1	?	H ± L		3			
Hydroriparian EI	Channel morphology	% source zone > 30 yr	NCC, SCC	7	✓	1	?	H ± L		3			
Hydroriparian EI	Water quantity (flow)	ECA in Fish WS	NCC, SCC	7	✓	1	?	H ± L		3			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: lakes	NCC, SCC	6.5	✓	1	?	H ± L		3			
Hydroriparian EI	Hydroriparian biodiversity	% riparian: wetlands	NCC, SCC	6.5	✓	1	?	H ± L		3			
Hydroriparian EI	Channel morphology	% riparian: wetland	NCC, SCC	6	✓	1	?	H ± L		3			
Hydroriparian EI	Channel morphology	pollutants	NCC, SCC	8	1	1	?	?		-			
Terrestrial EI	Ecosystem Representation	% mid	NCC, SCC	6	1	2	?	?		-			
Terrestrial EI	Tree species diversity	% of species	NCC, SCC	6	1	1	?	?		-			
Terrestrial EI	Ecosystem Representation	% young	NCC, SCC	5	1	2	?	?		-			

Prob. of Success												
Priority to detect consequences				Secondary		Planning p	Priority to	± Uncertainty		Detect Consequences		
Goal	Objective	Indicator	Scope	Secondary	Planning p	Priority to	Current P ₁	Future P ₂	Current P ₁	Future P ₁	Overall P ₁	Ease of M ₀
Terrestrial EI	Ecosystem Representation	% old	uncommon	9	✓	✓	?	L ± L	-	1	-	
Hydroriparian EI	Channel morphology	% riparian: fluvial	SCC	8	✓	1	?	L ± L	-	1	-	
Terrestrial EI	Stand structure	% retention	NCC, SCC	8	✓	1	?	L ± L	-	1	-	
Terrestrial EI	Stand structure	% in block	NCC, SCC	7	✓	1	?	L ± M	-	1	-	
Terrestrial EI	Ecosystem Representation	% old	common	9	✓	✓	?	H ± H	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	SCC	8.5	✓	1	?	M ± M	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: karst	NCC, SCC	8.5	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: debris streams	NCC, SCC	8.5	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Channel morphology	% unstable developed	NCC, SCC	8	1	1	?	L ± H	-	2	-	
Terrestrial EI	Rare Ecosystems	% of red	NCC, SCC	8	✓	1	?	H ± H	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: distinct streams	NCC, SCC	7.5	1	1	?	L ± H	-	2	-	
Terrestrial EI	Rare Ecosystems	% of non-listed	NCC, SCC	7.5	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Channel morphology	% riparian: debris streams	NCC, SCC	7	1	1	?	L ± H	-	2	-	
Terrestrial EI	Focal Species	% of critical habitat	NCC, SCC	7	1	1	?	L ± H	-	2	-	
Terrestrial EI	Rare Ecosystems	% of blue	NCC, SCC	7	✓	1	?	H ± H	-	2	-	
Hydroriparian EI	Water quantity (flow)	ECA in Non-Fish WS	NCC, SCC	7	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: other streams	NCC, SCC	6.5	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: ocean spray	NCC, SCC	6.5	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: bogs	NCC, SCC	6.5	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fens	NCC, SCC	6.5	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Riparian Connectivity	% natural corridors	NCC, SCC	6	1	1	?	L ± H	-	2	-	
Terrestrial EI	Salvage	% of key corridors	NCC, SCC	6	1	1	?	L ± H	-	2	-	
Hydroriparian EI	Valuable fish habitat	% cut in small watersheds	NCC, SCC	6	1	1	?	L ± H	-	2	-	
Terrestrial EI	Ecosystem Representation	% old	common; not \$	9	✓	✓	?	H ± L	-	3	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: estuaries	NCC	8.5	✓	1	?	H ± M	-	3	-	
Hydroriparian EI	Channel morphology	% riparian: fluvial	NCC	8	✓	1	?	H ± L	-	3	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: floodplains	NCC, SCC	7.5	✓	1	?	H ± M	-	3	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: fans	NCC, SCC	7.5	✓	1	?	H ± M	-	3	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: forested swamps	NCC, SCC	7.5	✓	1	?	H ± M	-	3	-	
Hydroriparian EI	Channel morphology	% riparian: transport/deposition	NCC, SCC	7	✓	1	?	H ± L	-	3	-	
Hydroriparian EI	Channel morphology	% source zone > 30 yr	NCC, SCC	7	✓	1	?	H ± L	-	3	-	
Hydroriparian EI	Valuable fish habitat	% riparian: HVFH	NCC, SCC	7	✓	1	?	H ± M	-	3	-	
Hydroriparian EI	Water quantity (flow)	ECA in Fish WS	NCC, SCC	7	✓	1	?	H ± L	-	3	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: med streams w fish	NCC, SCC	6.5	✓	1	?	H ± M	-	3	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: lakes	NCC, SCC	6.5	✓	1	?	H ± L	-	3	-	
Hydroriparian EI	Hydroriparian biodiversity	% riparian: wetlands	NCC, SCC	6.5	✓	1	?	H ± L	-	3	-	
Hydroriparian EI	Channel morphology	% riparian: wetland	NCC, SCC	6	✓	1	?	H ± L	-	3	-	
Hydroriparian EI	Channel morphology	pollutants	NCC, SCC	8	1	1	?	?	-	-	-	
Terrestrial EI	Ecosystem Representation	% mid	NCC, SCC	6	1	2	?	?	-	-	-	
Terrestrial EI	Tree species diversity	% of species	NCC, SCC	6	1	1	?	?	-	-	-	
Terrestrial EI	Ecosystem Representation	% young	NCC, SCC	5	1	2	?	?	-	-	-	

Priority to reduce goal uncertainty	
Goal	Goal Uncertainty
Hydroriparian EI	L
Terrestrial EI	M