Metric Name	Votes for Metric		Votes for BMPs & combining into one	TAC 11/28/12 Voting by Rank 1	2	3	4	5		Metric Name	Description	Unit of measure in ITAS	What type of tracking metric is it?	How could metric value over time be used to measure progress toward TMDL objectives? OR If targets already exist, what are they and how are they linked to TMDL?
Farm/Water Quality Plan Prepared	2			1	1				1	Farm/Water Quality Plan Prepared	Summary of total agricultural lands (acres) with Farm/Water Quality Plans that meet or exceed requirements of a Conditional Waiver of Waste Discharge.	acres of agricultural land	action tracking	Track progress toward future target acres of agricultural lands with farm/water quality plans.
Vineyard/Ranch BMP Tracking	7	4+5	5		1	1	2		2	Vineyard/Ranch BMP Tracking	Summary of type and number of BMPs implemented to reduce surface erosion and erosion from gullies and shallow landslides on vineyards and ranch lands. BMP types include buffer strips, fertilizer/nutrient management strategies, vegetation management, etc.	# of BMPs by type and extent	action tracking	Assume increasing # of BMPs implemented is making progress toward reducing sediment and improving stream function
Road BMP Tracking		3+5				1	1	1	3	Road BMP Tracking	Tracking of BMP implementation location type and date that occcurs on any private or public roads to reduce sediment: Types include culvert placement, rolling dips, outslopping, outboard ditch etc.	# of BMPs by type and extent	action tracking	Assume increasing # of BMPs implemented is making progress toward reducing sediment and improving stream function
Riparian BMP Tracking		5							4	Riparian BMP Tracking	Tracking of BMP implementation location type and date that occurs within the riparian zone or channel: types include revegetation, LWD preservation, toe protection, channel widening, bench creation etc.	# of BMPs by type and extent	action tracking	Assume increasing # of BMPs implemented is making progress toward reducing sediment and improving stream function
Hydrologically disconnected road miles	2			1		1			5	Hydrologically disconnected road miles	Spatial inventory and summary of total road miles in watershed or by subwatershed with concept that a measureable amount of roads will be hydrologically disconnected. Options to express include total road miles or % disconnected.	miles of road	action tracking	Track progress toward future target of miles of road to be hydrologically disconnected from receiving waters. Need to define how to consistently determine 'hydrologically connected'. Target equal to a 50% reduction in existing hydrologically connected road miles or 2030 target of 150 miles of road. (#s illustrative)
Sediment load reduction estimates	0								6	Sediment load reduction estimates	Estimate total tons/yr of sediment reductions associated with specific and completed management actions using standard yield reduction calculation.	MT of sediment/yr	load reduction estimate	Quantitative tracking toward target sediment load reduction 51% reduction from roads (Target = 27,000 MT/Y) 51% reduction from stream channel erosion (Target = 19,000 MT/Y) 51% reduction from ag land uses (Target = 33,000 MT/Y) 51% reduction from human actions above dams (Target = 5,000 MT/Y).
Bank Erosion Hazard Index (BEHI)	7			1		4		2	7	Bank Erosion Hazard Index (BEHI)	Rapid assessment of relative bank erosion risk by reach and bank. Existing field protocols (Rosgen).	miles of streambank	performance measure	Assess existing conditions and quantify miles of streambank >/= good condition. Set target to improve miles by 51% or (60 miles) by 2030 (#s illustrative).
Road Condition (Road RAM)	6			1	1	3	1		8	Road Condition (Road RAM)	Rapid assessment of relative sediment generation risk by road road segment. Existing field protocols (2NDNATURE)	miles of road	performance measure	Assess existing conditions and quantify miles of road >/= good condition. Set target to improve miles by 51% or (60 miles) by 2030 (#s illustrative).
Steelhead Fry Outmigrant Captures	11			1	6	4			9	Steelhead Fry Outmigrant Captures	Annual RST number of steelhead fry captures and mean fork length	# of fish; mm (mean fork length)	indicator	Final desired outcome: Increase seasonal fry captures by 10 times and increase mean fork length to > 250 mm. (#s illustrative)
Streambed permeability	4					2		2	10	Streambed permeability	Measure of flow rate through artificial redds constructed in reaches determined to be suitable for salmonid spawning.	cm/hr (permeability rate)	indicator	"The median value for streambed permeability shall be ≥7,000 cm per hour at potential spawning sites (20) for steelhead and salmon in the Napa River watershed." Difficult to provide meaningful summary of site results on watershed scale.
Stream habitat condition surveys	9			2		5	2		11	Stream habitat condition surveys	Rapid assessment of proper stream functioning characteristics to support salmonids.	miles of stream	indicator	Assess existing conditions and quantify miles of stream >/= good condition. Set target to improve miles by 50% or (60 miles) by 2030 (#s illustrative).
Streambed scour	1						1		12	Streambed scour	Depth of streambed scour measured in specific locations	cm (depth of scour)	indicator	"The mean depth of scour shall be ≤15 cm below the level of the overlying streambed substrate at typical pool-tails/riffle heads in all gravel-bedded reaches of mainstem Napa River and in the lower alluvial reaches of its perennial tributaries in reaches where the streambed slope is gentle (0.001 to 0.01). The target applies in response to all peak flows ≤ bankfull discharge." Difficult to provide meaningful summary of site results on watershed scale.
BMI	1			1					13	BMI	Discrete sampling and analysis of benthic macro-invertebrate (BMI) integrity, based on existing BMI scale for Napa Watershed.	IBI score (0-100)	indicator	Set desired minumum IBI score (80) for all sites. Difficult to provide meaningful summary of site results on watershed scale.
Miles of stream accessible to salmonids	1					1			14	Miles of stream accessible to salmonids	Miles of stream accessible to migrating species on Dec 1 (date to be determined) each year. Would include field evaluation of physical and hydrologic barriers on seasonal basis.	miles of stream	indicator	Assess existing conditions and quantify potential desired miles of stream accessible. Set target to increase miles by 50% or (60 miles) by 2030 (#s illustrative).
Streambed substrate surveys (RAM)	3					1	1	1	15	Streambed substrate surveys (RAM)	Rapid assessment of streambed fine sediment (<2 mm) content and distribution. Field protocols exist (2NDNATURE)	miles of stream	indicator	Assess existing conditions and quantify miles of stream >/= good condition. Set target to improve miles by 50% or (60 miles) by 2030 (#s illustrative).
baseflow	2							2						
measure of hydrology	1					1								
measure of impervious	1					1								
fish passage	1							1						
temperature	1							1						
				8	9	25	8	10						