

Stakeholder Alternatives Matrix Form

Water Quality

TRPA Staff Proposed Goal	Suggested Goal Language	TRPA Staff Proposed Policy *	Suggested Policy Language **	TRPA Staff Proposed Implementation Measure	Suggested Implementation Measure
WQ-1		WQ-1.1		WQ.IMP-1 Staff Recommendation for Amending the Code of Ordinances: Amend language in Water Quality Control Chapter. Focus change in Applicability, Discharge Limits, Prohibition of Wastewater Discharge and Prohibition of Toxic or Hazardous Waste Discharge sections.	WQ.IMP-1 Amend code to address conservation alternative recommendations.
WQ-1		<p>WQ-1.2 All persons who own land and all agencies which manage public lands in the lake tahoe region will implement best management practices (BMPs) that are consistent with current defensible space requirements. All BMPs must be functionally maintained to reduce TMDL pollutant and nutrient loads. Maintenance includes protecting vegetation and soil from unnecessary disturbance.</p>	<p>All persons who own land and all agencies which manage public lands in the Lake Tahoe region will implement best management practices (BMPs) that are consistent with current defensible space requirements. All BMPs must be functionally maintained to reduce TMDL pollutants and effluent limits as in the TRPA 208 plan, and the Basin Plan, fine sediment, nutrient loads, and other pollutants. Maintenance includes protecting vegetation and soil from disturbance. BMPs will be designed to capture and treat and/or infiltrate the runoff associated with a 100 year storm to account for climate change impacts.</p>	<p>WQ.IMP-2 Staff Recommendation for Amending the Code of Ordinances: Amend language in Best Management Requirements Chapter. Focus change in Applicability, Project Compliance Program, Standard BMP Requirements, Additional Requirements, Special Circumstances and Maintenance of BMPs Sections: particular attention to Temporary BMPs, Permanent BMPs, Discharge Permits and Alternative Residential Program subsections. Nexus Language required to link the Water Quality Control Chapter with the Best Management Practices chapter with focus on the updated Discharge Limits section connection to the 1 inch per hour stormwater runoff volume.</p> <p>WQ.IMP-3 Continue to develop the 3rd Edition of the BMP Handbook to provide clear technical guidance on BMP maintenance consistent with Water Quality subelement and threshold findings</p>	<p>WQ.IMP-2 DELETE – repeats IMP-1</p> <p>ADD as WQ Implementation Measure: TRPA must adopt a mandatory BMP program and enforce it beginning on adoption of the Regional Plan and complete all enforcement actions to assure 100% compliance by no later than December 31st, 3 years after the Regional Plan adoption.</p> <p>ADD as WQ Implementation Measure: Enforce BMPs by issuing a penalty for all property owners who are not in compliant with mandatory BMP requirements, whether as individual property BMPs or part of an existing effective area-wide or multi-parcel system. TRPA may also place a lien on homeowners to cover the cost of BMP installation.</p> <p>ADD as WQ Implementation Measure: All construction projects must either install BMPs on site that treat 100% runoff or connect to an existing operating treatment system that effectively removes pollutants</p> <p>ADD as WQ Implementation Measure: Strengthen the handbook of Best Management Practices to include design alternatives for 100% onsite treatment for projects.</p> <p>WQ.IMP-3 Continue to develop the 3rd Edition of the BMP Handbook to provide clear technical guidance on BMP maintenance consistent with Water Quality subelement and threshold findings and Defensible Space measures and as</p>

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				<p>and Defensible Space measures as required in the Code of Ordinances and by the Rapid Assessment Methodology (RAM) evaluation protocol for the Lake Clarity Crediting System.</p>	<p>verified by an annual field monitoring and reporting program.</p> <p>ADD as WQ Implementation Measure: <u>Strengthen Handbook of Best Management Practices by integrating defensible space, water quality and vegetation standards. Create protective standards for sanding/salting and street sweeping (including required schedule of sweeping with BAT) to strengthen protection of water quality. Identify roadways that have the greatest impacts on water quality and prioritize sweeping and BMPs for those areas first.</u></p> <p>ADD as WQ Implementation Measure: <u>In the first year after adoption of the new Regional Plan, an inventory of the BMP status of existing homes and structures in the Basin will be completed. In the second year after adoption, TRPA and local jurisdictions will increase enforcement staff and/or staff time to visit every property that is not complying with BMP regulations and issue a notice, at minimum. A fine may also be charged. If there are not enough staff available to complete this in one year, staff time will be spent visiting non-compliant structures in those areas with the greatest impact on pollutant loading. Agency priorities will be adjusted to increase BMP compliance staff as needed to complete this program. Visits of all properties must be completed by the end of the third year after adoption of the new plan. By the end of the fourth year after adoption, all non-compliant properties must have BMPs installed, otherwise a maximum fine will be charged and a portion used to install BMPs on the non-compliant properties and/or connect to existing multi-property/area-wide treatment.</u></p> <p>ADD as WQ Implementation Measure: <u>To support the substantial increase in demand for contractors and services related to BMP installation that results from increased enforcement, TRPA will advertise beyond the Lake Tahoe Region for contractors and other service providers to be educated on BMP installation in Lake Tahoe and be on a list of available contractors and companies. Enough trained companies must be available to support the installation of BMPs on every property in the first four years after Plan adoption.</u></p> <p>ADD as WQ Implementation Measure: <u>TRPA will work with local agencies to create a low- and moderate-income loan program for assisting homeowners with BMP installation.</u></p> <p>ADD as WQ Implementation Measure:</p>

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					Include in the updated BMP Manual the flexibility for property owners to install “equal or superior” BMPs which may not specifically be identified in the Manual, <u>provided installation is timely.</u>
		<p>Added in Factsheet FollowUp, page 1:</p> <p><i>TRPA will develop and implement a focused enforcement, implementation, maintenance, and inspection strategy to accelerate BMP compliance in high-priority areas as informed by the TMDL and assist local jurisdiction implementation of stormwater management plans using state-of-the-art technology and allowing for new technologies.</i></p> <p><i>And:</i> <i>Include in the updated BMP Manual the flexibility for property owners to install “equal or superior” BMPs which may not specifically be identified in the Manual.</i></p>	<p>TRPA will develop and implement a focused enforcement, implementation, maintenance, and inspection strategy to accelerate BMP compliance <u>with initial emphasis</u> in high-priority areas as informed by the TMDL <u>research</u> and assist local jurisdiction implementation of stormwater management plans using state-of-the-art technology and allowing for new technologies. <u>All BMPs must be installed within 3 - 4 years of Regional Plan adoption.</u></p>		
<p>WQ-1 Restore and maintain the water quality of Lake Tahoe for the purposes of human enjoyment and to preserve its ecological status as one of the few large, deepwater, ultraoligotrophic lakes in the world. Restore and maintain lake Tahoe’s unique transparency, color and clarity.</p>	<p>Consistent with the achievement and maintenance of the environmental threshold carrying capacities, restore and maintain the water quality of Lake Tahoe for the purposes of human enjoyment and to preserve its ecological status as one of the few large, deepwater, ultraoligotrophic lakes in the world. Restore and maintain lake Tahoe’s unique transparency, color and clarity.</p>	<p>WQ-1.3 Implementation and maintenance of temporary and permanent BMPs will be required as a condition of approval for permitting new projects. Alternatively, area-wide solutions that achieve water quality treatment may include irrevocable commitments for comprehensive multi-parcel participation and long term maintenance will be eligible for meeting BMP program requirements.</p>	<p>Implementation and <u>continuous</u> maintenance of temporary and permanent BMPs will be required as a condition of approval for permitting new projects.</p>	<p>WQ.IMP-4 Staff Recommendation for Amending the Code of Ordinances: Amend language in Best Management Requirements chapter. Focus change in Applicability, Project Compliance Program, Standard BMP Requirements, Additional Requirements, Special Circumstances and Maintenance of BMPs sections. Particular attention will be given to the Temporary BMPs, Permanent BMPs, Discharge Permits and Alternative Residential Program subsections.(</p> <p>WQ.IMP-5 Continue to support the funding for the Erosion Control Team as a critical implementation program to achieve Water Quality threshold and policy objectives. Assist in securing continued long term funding for current BMP Retrofit Program and seriously explore Budget Change Proposal (BCP) process to include (request and propose) permanent program funding as a line item in TRPA’s general fund. (and not rely on federal 319h grant funds and state proposition grant funds to</p>	<p>DELETE WQ.IMP-4; repeat WQ.IMP-1</p> <p>WQ.IMP-5 Continue to support the funding for the Erosion Control Team as a critical implementation program to achieve Water Quality threshold and policy objectives. Assist in securing continued long term funding for current BMP Retrofit Program and seriously explore Budget Change Proposal (BCP) process to include <u>permanent</u> program funding as a line item in TRPA’s general fund. Discontinue reliance on federal 319h grant funds and state proposition grant funds to continue supporting the BMP program.</p>

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				<p>continue supporting the BMP program).</p> <p>WQ.IMP-6 Continue to develop the 3rd Edition of the BMP Handbook to provide clear technical guidance on BMP maintenance consistent with Water Quality Threshold findings identified in the Code of Ordinances and by the Rapid Assessment Methodology (RAM) evaluation protocol for the Lake Clarity Crediting System.</p> <p>WQ.IMP-7 TRPA staff will work with SQWIC to update the Project Delivery Process (PDP) for conducting the Existing Conditions Analysis (ECAM) and the Formulation and Evaluation of Alternatives (FEA) procedures to better capture and evaluate opportunities for areawide stormwater treatment that include the private parcel infill in the project design.</p>	<p>DELETE WQ IMP-6: same as IMP-3</p> <p>ADD as WQ Implementation Measure: <u>New development and re-development projects must retain and treat runoff from a 100-year storm, for the complete range of soil saturation levels, on-site with stormwater treatment utilizing the best available technology and innovative practices, unless an existing fully functioning off-site system is available. Additionally, secondary system(s) would be required to accommodate "overflow" events with a media form suitable for fine sediment capture (e.g. pine needle boughs). This media would need to be inspected and replaced if necessary after storm events. BMPs would need to be constructed first as part of any project.</u></p> <p>ADD as WQ Implementation Measure: <u>A performance bond equivalent to the cost plus 10 percent of BMP construction will be posted by the project proponent until BMPs are installed and functioning. If project is not completed, performance Bond funds will be used to BMP the site. Any difference between the bond and the final cost will result in TRPA filing a lien on the property to recover those costs.</u></p> <p>ADD as WQ Implementation Measure: <u>An in-perpetuity-bond will be required to assure operation and maintenance of the BMPs for the first ten years of operation.</u></p>
WQ-1		WQ-1.4 Restore the native vegetation and the natural hydrologic function of the soil to at least 80 percent of the disturbed public lands within the Tahoe region.	WQ-1.4 Restore native vegetation and the natural hydrologic function of the soil to more than <u>90</u> percent of the disturbed public lands within the Tahoe Basin. <u>Require restoration of native vegetation and hydrologic function of the soil on private parcels in the Basin, and removal of illegal hard and soft coverage.</u>	WQ.IMP-7 Staff Recommendation for Amending the Code of Ordinances: Amend Land Coverage Standards Environmental Improvement Program and the Water Quality Mitigation chapters. Focus change in Water Quality Mitigation chapter in Applicability, Required Offsets, Exemptions, Use and Distribution of Mitigation Funds sections; with particular attention given to the Mitigation Projects subsection. For the Environmental Improvement Program chapter the focus will be on the EIP Relationship to other Plans section with particular attention given to Mitigation Fees and Relationship to the 208 Water Quality Plan subsections. For the Land Coverage Standards chapter focus change in	DELETE WQ.IMP-7; repeat WQ.IMP-1 WQ.IMP-8 This proposed policy <u>will</u> require TRPA staff to participate in the development of jurisdictional Stormwater Management Plans or Stormwater Load Reduction Plans to assist county and state staff in addressing this objective. <u>TRPA staff will also maintain regular participation in the Regional Stormwater Monitoring Program (RSWMP); participation will be a priority in TRPA staff work programs and supported by executive staff.</u> This proposed policy will require continued EIP program emphasis and funding and continued inter-agency collaboration with state funding and project implementing agencies such as California Tahoe Conservancy and Nevada State Lands (among

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				<p>the Manner of Transferring Land Coverage, Prohibition of Additional Land Coverage in Land Capability Districts 1a, 1c, 2, 3 and 1b (Stream Environment Zones) and Land Coverage Requirements for Redevelopment Projects sections. Particular attention will be given to the Restoration and Retirement of Land Coverage and Restoration Requirements subsections and Removal of Land Coverage for Credit subparagraph. Nexus language may be required by amending the Transfer of Development chapter with focus on the Restriction of Parcels section. Nexus language will be required by amending the Definitions chapter.</p> <p>WQ.IMP-8 This proposed policy may require TRPA staff to participate in the development of jurisdictional Stormwater Management Plans or Stormwater Load Reduction Plans to assist county and state staff in addressing this objective. This proposed policy will require continued EIP program emphasis and funding. This proposed policy will require continued inter-agency collaboration with state funding and project implementing agencies such as California Tahoe Conservancy and Nevada State Lands (among others) . TRPA will need to closely evaluate it's restoration crediting program for incentivizing the successful implementation of these directives.</p>	<p>others) . TRPA will need to closely evaluate its restoration crediting program to assure the program will achieve and maintain threshold standards</p> <p>ADD as WQ Implementation Measure: <u>Work with Land Banks to proactively identify land for potential restoration/deed restriction/coverage retirement and/or conservation easements, including small areas. Prohibit new excess coverage until mitigation fees are proven substantial enough to pay for successful and complete restoration, deed restriction and coverage retirement of sensitive lands.</u></p> <p>ADD as WQ Implementation Measure: <u>In over-covered subwatersheds as identified in IKONOS, new land coverage on undeveloped parcels is limited to the Bailey Land Coverage standards for soils classified 4-7. The new permitted coverage must be offset at a ratio of 1.5:1 by removal and restoration of coverage on class 4-7 sites located within the same subwatershed to result in a net reduction in coverage. New coverage on soils classified 1-3 is prohibited.</u></p> <p><u>In under-covered subwatersheds identified in IKONOS, new coverage is limited to the Bailey Land Coverage standards.</u></p>
WQ-1		<p>WQ-1.5 Local governments, state transportation departments and other implementing agencies will restore the hydrologic function of SEZ's that have been disturbed, developed, or subdivided in accordance with the SEZ threshold and environmental improvement program's goals.</p>	<p>WQ-1.5 Local governments, state transportation departments and other implementing agencies will restore the hydrologic function of SEZ's that have been disturbed, developed, or subdivided in accordance with <u>attainment and maintenance of the SEZ threshold.</u></p>	<p>WQ.IMP-9 Staff Recommendation for Amending the Code of Ordinances: Amend Land Coverage Standards, Environmental Improvement Program and Water Quality Mitigation Chapters. Focus change in the Water Quality Mitigation Chapter in the Applicability, Required Offsets, Exemptions, Use and Distribution Of Mitigation Funds and Stream Zone Restoration Program Sections; with particular attention to the Mitigation Projects subsection. For the Environmental Improvement Program chapter the focus will be on the EIP Relationship to other Plans section with particular attention given to the Mitigation Fees and Relationship to the 208 Water Quality Plan subsections. For the Land Coverage Standards Chapter the change will be focused in the Manner of Transferring Land Coverage, Prohibition of Additional Land Coverage in Land Capability Districts 1a, 1c, 2, 3 and 1b (Stream Environment Zones) and Land Coverage Requirements for Redevelopment Projects sections. Particular attention will be given to the Restoration and Retirement of Land Coverage and Restoration Requirements subsections and Removal of Land</p>	<p>DELETE WQ.IMP-9; repeat WQ.IMP-1</p> <p>ADD as WQ Implementation Measure: <u>The CTC and Nevada Land Act should manage a program to acquire and restore SEZ to a fully functioning state. Funds would be attained from state and federal government programs.</u></p> <p>ADD as WQ Implementation Measure: <u>Land Banks should be integrated with the Regional Plan to act effectively to acquire disturbed, developed and subdivided and SEZs in need of protection for restoration and deed restriction.</u> <u>Excess coverage mitigation fees must be commensurate with costs to purchase, deed restrict and restore disturbed and developed SEZ lands.</u></p>

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				Coverage for Credit subparagraph. A consistency nexus may be required by amending the Transfer of Development Chapter with focus on the Restriction of Parcels section and the Transfer of All Existing Development from Sensitive Lands subparagraph.	
WQ-1		WQ-1.6: Prohibit fertilizer, herbicide and pesticide use in the Lake Tahoe basin.	WQ-1.6: Prohibit <u>the use of fertilizers that introduce additional nitrogen and phosphorous into Tahoe's environment and prohibit the outdoor use of pesticides</u> in the Lake Tahoe basin.	This policy is intended to prevent impact from fertilizer in sensitive areas, stormwater runoff and groundwater through an absolute prohibition. One of Lake Tahoe's primary water quality problems is the imbalance in the Lake's nutrient budget. Consequently, prohibiting the use of artificial fertilizers and pesticides could be argued to be an essential component of TRPA's Water Quality subelement and program. Nitrogen and phosphorus load reduction requirements have been identified in the Lake Tahoe TMDL, Pollution Control Opportunities Report and Integrated Water Quality Management Strategy Report. These load reduction objectives may require an absolute prohibition on fertilizer use in order to reduce nitrogen and phosphorus loads to surface and ground waters. Pesticide use in the Lake Tahoe Basin is considered rather minimal beyond institutional or commercial applications but these chemical substances are often classified by the EPA as persistent contaminants for soil and water resources. Their use will also be prohibited by amending the Pesticide Use section of the Water Quality Control chapter.	<p>ADD as WQ Implementation Measure: <u>Incorporate prohibition of pesticides and fertilizers into BMP/Defensible Space/Native vegetation guidelines and requirements. Prohibit discharge of pesticides, herbicides and fertilizers at golf courses, schools, play fields, commercial facilities, homeowners associations' common areas and other large users of turf.</u></p> <p>ADD as WQ Implementation Measure: <u>Turf Reduction: In conjunction with water districts incentivize turf reduction in favor of naturally functioning land or native-plant, low-water landscaping. Consider LTRA funding to provide resources for turf reduction and native plant distribution. Alternatively the turf reduction program can be funded through turf user fee imposed upon water bills.</u></p>
WQ-1		DELETED from WQ due overlap with Recreation WQ1.7 Off road vehicle use is prohibited in the Lake Tahoe region except on specified roads, trails, or designated areas where the impacts can be controlled.		N/A	<p>ADD as WQ Implementation Measure: <u>Phase in BAT requirements for OHVs.</u></p> <p>ADD as WQ Implementation Measure: <u>Roads and trails that allow OHV must be fully BMP'd, maintained and have a frequent maintenance schedule in order to prevent soil erosion and prevent soil erosion and diversions occurring at stream crossings, otherwise they will be decommissioned and restored to grade and soil function by 2015. Stabilization at all stream crossings is required to avoid impacts from OHV use.</u></p>

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WQ-1		<p>WQ-1.8 State and local jurisdictions must develop, adopt and implement stormwater management plans, stormwater load reduction plans or a functional equivalent to guide the implementation of capital projects and operations and maintenance activities. These plans must identify how loads of fine sediment, nitrogen and phosphorus will be reduced by implementing advanced pollution control measures in urban districts, along roads and highways and in areas of concentrated impervious coverage.</p>	<p>WQ-1.8 Urban Areas: State and local jurisdictions must develop, adopt and implement stormwater management plans, stormwater load reduction plans or a functional equivalent to guide the implementation of capital projects and operations and maintenance activities. These plans must identify how <u>fine sediment, nitrogen and phosphorus</u> will be reduced by implementing advanced pollution control measures in urban districts, along roads and highways and in areas of concentrated impervious coverage.</p> <p>Non-Urban Areas: Federal, state and local jurisdictions must develop, adopt and implement stormwater management plans, stormwater load reduction plans <u>or effluent limitation plans that are consistent with required load reductions for fine sediment, nitrogen and phosphorous for non-urban areas</u> to guide the implementation of capital projects and operations and maintenance activities. These plans must identify how f fine sediment, nitrogen and phosphorus will be reduced by implementing advanced pollution control measures, along roads and streets and in areas of all areas of human disturbance. <u>Plans must also identify how sediment and nutrient reductions will be confirmed through field monitoring and reporting.</u></p>	<p>WQ.IMP-12 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control chapter to include the requirement for developing and adopting SWMP's SLRP's. These amendments will also require that these documents identify the commitments for TMDL pollutant load reduction. With focus on the Applicability and Discharge Limits sections. Amend the Grading Standards chapter with focus on the Discharge Prohibitions section. Consistency nexus will be required in the Grading and Construction Schedule chapter with focus on the Grading and Construction Schedule section. Additional consistency nexus will be required for the BMP Requirements chapter in the Project Compliance Program, Standard BMP Requirements and Maintenance of BMPS sections. Consider consistency language in the Environmental Improvement Program chapter with focus on the EIP Relationship to Other Plan Provisions section. Consider consistency language in the Allocation of Development chapter with focus on the Distribution and Administration of Residential Allocations section and Water Quality Improvement subsection.</p>	<p>DELETE WQ.IMP-127; repeat WQ.IMP-1</p> <p>ADD as WQ Implementation Measure: <u>Code will require that SWMPs identify adequate levels of monitoring and jurisdictions must implement monitoring on an ongoing basis, whether through contributions to and/or participation in the RSWMP program or an equivalent program.</u></p>

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WQ-1		<p>WQ-1.9 Require roadway operations and maintenance programs to employ advanced control measures to reduce fine particulate from suspended road dust and surface runoff. These measures must include but are not limited to: employing alternative road paving materials, reducing the use of road abrasives and implementing more efficient road sweeping programs and technology. Store road salt in contained facilities to prevent off-site discharge.</p>		<p>WQ.IMIP-13 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control chapter with focus on the Applicability and Discharge Limits sections. Amend the BMP Requirements Chapter in the Project Compliance Program, Standard BMP Requirements and Additional Requirements and Maintenance of BMPS sections. Consider nexus language in the Environmental Improvement Program chapter with focus on the EIP Relationship to Other Plan Provisions section and particular attention given to the Mitigation Fees and Relationship to the 208 Water Quality Plan subsections. Consider nexus language in the Allocation of Development chapter with focus on the Distribution and Administration of Residential Allocations section and Water Quality Improvement subsection.</p>	<p>DELETE WQ.IMP-13; repeat WQ.IMP-1</p> <p>ADD as WQ Implementation Measure: <u>Robust schedules for each jurisdiction for road maintenance and BAT sweeping must be established, adopted and enforced. Unless weather or surface conditions render road sweeping impossible, all major roads, including turning lanes, shall be, at a minimum, swept twice per month and all remaining roads shall be swept once per month.</u></p> <p>ADD as WQ Implementation Measure: <u>Definition of road maintenance must be developed and include repaving, BAT-equipment-sweeping and reducing impacts from salt.</u></p> <p>ADD as WQ Implementation Measure: <u>All traction materials on any roadways in the Basin need to demonstrate 1) a high resistance to pulverization, to 20 micron or less particles, and 2) zero or extremely low phosphorous content</u></p>
WQ-1		<p>WQ-1.10 Reduce airborne loads of fine particulates from suspended dust from unpaved roads and construction sites. Reduce fine sediment loads generated by stormwater runoff from unpaved roads and construction sites.</p>	<p>WQ-1.10 Reduce airborne loads of fine particulates from suspended dust from unpaved roads. <u>Prohibit</u> airborne loads of fine sediments and particulates from construction sites. Reduce fine sediment loads generated by stormwater runoff from unpaved roads <u>and construction sites.</u></p>	<p>WQ.IMP-14: Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control chapter with focus on the Applicability and Discharge Limits sections. Amend the Grading Standards chapter with focus on the Seasonal Limitations, Dust Control and Discharge Prohibitions sections with particular attention being given to the Winterization subsection. Consistency nexus will be required in the Grading and Construction Schedule chapter with focus on the Grading and Construction Schedule section. Additional nexus language will be required for the BMP Requirements chapter in the Project Compliance Program, Standard BMP Requirements and Maintenance of BMPS sections. Consider nexus language in the Environmental Improvement Program chapter with focus on the EIP Relationship to Other Plan Provisions section. Consider nexus language in the Allocation of Development chapter with focus on the Distribution and Administration of Residential Allocations section and Water Quality Improvement subsection. The Code (BMP Requirements chapter) will require new language that provides for requiring Construction or Operational Stormwater Pollution Prevention Plans (SWPPPs) or a functional equivalent for project areas creating disturbance that will be greater than one acre, and comprehensive BMP plans or a</p>	<p>DELETE WQ.IMP-14; repeat WQ.IMP-1</p> <p>ADD as WQ Implementation Measure: <u>Mandate use of water trucks onsite for dust suppression on construction sites.</u></p> <p>ADD as WQ Implementation Measure: <u>TRPA will require projects use the most advanced BMP practices available for use in mountain environments for construction sites.</u></p>

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				<p>functional equivalent for project areas less than one acre as a condition of permitting in order to require more exacting details as to how potential water quality impacts will be prevented, minimized or mitigated in these settings.</p> <p>WQ.IMP-15 Continue to develop the 3rd Edition of the BMP Handbook to provide clear technical guidance on BMP maintenance consistent with Water Quality subelement threshold findings identified in the Code of Ordinances for the retrofitting and appropriate treatment measures for unpaved roads and surfaces. Develop clear guidelines for SWPPP's, comprehensive BMP plans or their functional equivalent.</p>	
		<p>WQ-1.11 All persons engaging in snow disposal operations on public and private lands will store snow in accordance with updated BMP design criteria and disposal practices. Structural stormwater BMPs that will be relied on for providing winter snow storage must be designed and constructed to prevent discharge of concentrated snow melt and contaminants to SEZs, groundwater or surface water.</p>		<p>WQ.IMP-16 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control chapter with focus on the Applicability and Snow Disposal sections. Amend the Grading Standards chapter with focus on the Discharge Prohibitions and Winterization sections. Additional consistency nexus will be required for the BMP Requirements chapter in the Standard BMP Requirements and Maintenance of BMPS sections.</p> <p>WQ.IMP-17 Continue to develop the 3rd Edition of the BMP Handbook to provide clear technical guidance on BMP design and construction standards that are consistent with Water Quality subelement threshold findings identified in the Code of Ordinances regarding the structural and geotechnical requirements for using these stormwater facilities for winter snow storage.</p>	
<p>WQ-1 Restore and maintain the water quality of Lake Tahoe for the purposes of human enjoyment and to preserve its ecological status as one of the few large, deepwater, ultraoligotrophic lakes in the world. Restore and maintain lake Tahoe's unique transparency, color and clarity.</p>		<p>WQ-1.12 The technical evaluation of functional performance for best management practices will be established by an appropriate inter-agency water quality advisory committee.</p>	<p>WQ-1.12 The technical evaluation of functional performance <u>and appropriate monitoring protocols</u> for best management practices will be established by an appropriate inter-agency water quality advisory committee. <u>This committee will contain at least two representatives from UNR, UCD, the Tahoe Science Consortium, and/or Tahoe Environmental Resource Center. If needed, TRPA will establish an account to pay scientists for their time on Committee to ensure participation from the scientific community.</u></p>	<p>WQ.IMP-18 Staff Recommendation for Amending the Code of Ordinances: Develop new language in be Best Management Requirements chapter with focus on the Project Compliance Program, Standard BMP Requirements, Special Circumstances and Maintenance of BMPs sections. Amend Water Quality Control chapter with focus on the Applicability and Discharge Limits to require that all BMPs be evaluated based on a functional criteria for BMP performance as TMDL pollutant source controls, hydrologic controls (reducing runoff volumes and velocities), and treatment train or end-point pollutant removal systems.</p> <p>WQ.IMP-19 TRPA staff will need to facilitate and develop this subcommittee and process through a coordinated inter-agency (Regulatory, Implementing and Funding Agencies) arrangement with RSWMP members and assembled with redundant members from SQWIC.</p>	<p>WQ.IMP-18 Staff Recommendation for Amending the Code of Ordinances: Develop new language in be Best Management Requirements chapter with focus on the Project Compliance Program, Standard BMP Requirements, Special Circumstances and Maintenance of BMPs sections. Amend Water Quality Control chapter with focus on the Applicability and Discharge Limits to require that all BMPs be evaluated based on a functional criteria for BMP performance <u>as pollutant source controls, hydrologic controls (reducing runoff volumes and velocities), treatment trains, and end-point naturally-functioning pollutant removal systems. Field monitoring is required.</u></p> <p>ADD as WQ Implementation Measure: <u>TRPA will work with the LRWQCB and NDEP to establish a crediting system which rewards the use of naturally-functioning systems, such as flood plains, for pollutant load reductions. System will emphasize the restoration of existing disturbed areas to naturally-functioning areas</u></p> <p>WQ.IMP-19 <u>The interagency water quality advisory committee</u></p>

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				<p>WQ.IMP-19 TRPA staff will need to facilitate and develop this subcommittee and process through a coordinated inter-agency (Regulatory, Implementing and Funding Agencies) arrangement with RSWMP members and assembled with redundant members from SQWIC.</p>	<p><u>will be established within one month of adoption of the Regional Plan Update.</u> TRPA staff will need to facilitate and develop this subcommittee and process through a coordinated inter-agency (Regulatory, Implementing and Funding Agencies) arrangement with RSWMP members and assembled with redundant members from SQWIC.</p>
<p>WQ-2 (per 1987 Goals and Policies)</p>		<p>Now recommended to be WQ-1.14: The standards for backshore BMPs and shorezone protective structures will include specific littoral analysis, special construction techniques, updated engineering practices and site specific development criteria.</p>	<p>WQ-1.14: The standards for backshore BMPs and shorezone protective structures will include specific littoral analysis, <u>including all environmental impacts on the backshore, shore and Lake,</u> special construction techniques, updated engineering practices and site specific development criteria.</p>	<p>WQ.IMP-21 Staff Recommendation for Amending the Code of Ordinances: Amend all of the Shorezone BMP appendix and develop nexus language to the BMP Requirements chapter in the Applicability, BMP Compliance Program and Standard BMP requirements sections with reference to the Temporary and Permanent BMPs subsections. Consider nexus language in the Grading Standards chapter with focus on the Discharge Prohibitions and Disposal of Materials sections. Consider additional consistency language in the Special Information Reports and Plans chapter. Consider updating language in the Definitions chapter.</p> <p>WQ.IMP-22 Continue to develop the 3rd Edition of the BMP Handbook to provide clear technical guidance on the design standards and maintenance requirements for backshore BMPs and shorezone protective structures.</p> <p>WQ.IMP-28 (We noted this is repeat of IMP-21)</p>	<p>WQ.IMP-21: Amend the Shorezone BMP appendix and develop nexus language to the BMP Requirements Chapter in the Applicability, BMP Compliance Program and Standard BMP requirements sections with reference to the Temporary and Permanent BMPs subsections. <u>Develop</u> nexus to the Grading Standards Chapter with focus on the Discharge Prohibitions and Disposal of Materials sections. <u>Develop</u> additional consistency language in the Special Information Reports and Plans chapter.</p>

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TRPA Staff Proposed Goal	Suggested Goal Language	TRPA Staff Proposed Policy *	Suggested Policy Language **	TRPA Staff Proposed Implementation Measure	Suggested Implementation Measure
WQ-1		WQ-1.15 Provide incentives to land acquisition and buyout programs to permanently retire excess coverage.	WQ-1.15 <u>Create an integrated and comprehensive system that successfully operates to buy, retire, restore and deed restrict sensitive land.</u>	WQ.IMP-23 Staff Recommendation for Amending the Code of Ordinances: Amend the Land Coverage chapter with focus on the Transferred Land Coverage Requirements and Restoration Requirements sections and amend the Water Quality Mitigation chapter with focus on the SEZ Restoration Program section.	
		NONE		W. Q. Goal 2 Implementation Measure: Amend language in the Goals and Policies Document of TRPA's Regional Plan	
GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.	Human & environmental health: In accordance with achievement and maintenance of the environmental carrying capacities, water quality standards in the Lake Tahoe region must be consistent with the protection of human and environmental health.	WQ-2.1 Public agencies will update and enhance their spill contingency, prevention and detection plans to reduce the risk of illicit discharges of sewage or wastewater to surface water, groundwater or soil. The discharge or disposal of solid wastes to the surface water, groundwater or soil is prohibited except for specific emergencies requiring the protection of public health.	SAME	WQ.IMP-25 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control Chapter with focus on the Applicability, Discharge Limits, Prohibition of Wastewater Discharge and Spill Control sections with special attention being given to the Holding tanks and Other No discharge Systems subsections. Consider nexus to the Grading Standards Chapter with focus on the Excavation Limitations Sections; with focus on the Groundwater Interception and Excavation subsections. Consider additional consistency language in the Special Information Reports and Plans chapter with focus on the Subsurface Investigations and Reports section.	SAME
GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.		DELETED as separate policy. This objective has been integrated into POLICY WQ-1.9 as proposed above. WQ2.3 All institutional users of road salt in the Lake Tahoe region shall keep records showing the time, rate, and location of salt application. Storage of road salt shall be in accordance with the handbook of best management practices.	WQ2.3 All institutional users of road salt in the Lake Tahoe region shall keep records showing the time, rate, and location of salt application. Storage of road salt shall be in accordance with the handbook of best management practices. <u>A reduction in the use of road salt will be encouraged.</u>	NA	ADD as WQ Implementation Measure: <u>Encourage and support scientific studies of new road anti- and de-icing materials and/or techniques which reduce the amount of salt introduced in roadway operations while maintaining public health and safety needs.</u>

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Water Quality

TRPA Staff Proposed Goal	Suggested Goal Language	TRPA Staff Proposed Policy *	Suggested Policy Language **	TRPA Staff Proposed Implementation Measure	Suggested Implementation Measure
<p>GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.</p>		<p>WQ-2.2 Phase out underground storage tanks for sewage, fuel, or other hazardous or toxic substances where possible. Where this is not possible, replace underground storage tanks with best available technology. Underground facility replacements will be installed, maintained, and monitored in accordance with TRPA and state regulations.</p>		<p>WQ.IMP-26 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control Chapter with focus on the Applicability, Discharge Limits, Prohibition of Wastewater Discharge and Prohibition of Toxic or Hazardous Waste Discharge and Spill Control sections with special attention being given to the Holding tanks and Other No discharge Systems subsections. Consider nexus to the Grading Standards Chapter with focus on the Excavation Limitations Sections; with focus on the Groundwater Interception and Excavation subsections. Consider additional consistency language in the Special Information Reports and Plans chapter with focus on the Subsurface Investigations and Reports section</p>	<p>ADD as WQ Implementation Measure: <u>Establish a schedule to phase out underground storage tanks for sewage, fuel, or other hazardous or toxic substances where possible.</u></p> <p>ADD as WQ Implementation Measure: <u>Coordinate with local public utility districts/water companies and Lahontan Water Quality Control Board to identify underground storage tanks to be removed.</u></p>
<p>GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.</p>		<p>Deleted as a stand-alone policy and recommended to merge with WQ-2.1</p> <p>WQ2.5 No person shall discharge solid wastes in the Lake Tahoe region by depositing them on or in the land, except as provided by TRPA ordinance.</p>	<p>WQ2.5 No person shall discharge solid wastes in the Lake Tahoe region by depositing them on or in the land.</p>	<p>N/A</p>	<p>ADD as WQ Implementation Measure: <u>Coordinate with USFS, local jurisdictions and law enforcement to enforce dumping prohibitions with fines and orders for removal.</u></p> <p>ADD as WQ Implementation Measure: <u>Coordinate with public land agencies to require pet owners to pack out pet waste from public recreation lands.</u></p> <p>ADD as WQ Implementation Measure: <u>“Mut mits” need to be available at all trail heads and tourist destination areas. The TRPA should encourage ordinances that require people to pick up after their pets as in other cities throughout the nation. Implement signage and an education campaign informing the public of the importance of picking up after their pets.</u></p> <p>ADD as WQ Implementation Measure: <u>Livestock Confinement Facilities: Any livestock waste needs to be collected and linked to existing sewer systems for disposal.</u></p>

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			<p>ADD as WQ Policy:</p> <p>2.5.5 Require primitive camping techniques relating to zero impact on public lands.</p>		<p>ADD as WQ Implementation Measure:</p> <p><u>Coordinate with Forest Service to require hikers and backpackers to pack out human waste from heavily used areas such as Desolation Wilderness and enforce this measure.</u></p>
<p>GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.</p>		<p>WQ-2.3 TRPA will cooperate with those agencies in the Lake Tahoe region that are responsible for the preparation, evaluation, and implementation of toxic and hazardous spill control plans.</p>		<p>WQ.IMP-27 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control Chapter with focus on the Applicability, Discharge Limits, Prohibition of Toxic or Hazardous Waste Discharge and Spill Control sections. Consider nexus to the Grading Standards Chapter with focus on the Discharge Prohibitions and Disposal of Materials sections. Consider additional consistency language in the Special Information Reports and Plans chapter with focus on the Subsurface Investigations and Reports section.</p>	<p>WQ.IMP-27 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control Chapter with focus on the Applicability, Discharge Limits, Prohibition of Toxic or Hazardous Waste Discharge and Spill Control sections. <u>Develop</u> nexus to the Grading Standards Chapter with focus on the Discharge Prohibitions and Disposal of Materials sections. <u>Develop</u> additional consistency language in the Special Information Reports and Plans chapter with focus on the Subsurface Investigations and Reports section.</p>
<p>GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.</p>		<p>WQ-2.4 Liquid or solid wastes from recreational vehicles and boats will be discharged only at approved pump-out facilities. Pump-out facilities will be provided by public utility districts, marinas, campgrounds, and other relevant facilities to prevent spills and inadvertent discharges.</p>		<p>WQ.IMP-29 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control Chapter with focus on the Applicability, Discharge Limits, Prohibition of Wastewater Discharge, Prohibition of Toxic or Hazardous Waste Discharge and Spill Control sections with special attention being given to the Holding tanks and Other No discharge Systems subsections</p>	<p>ADD as WQ Implementation Measure:</p> <p><u>TRPA will require annual reports from each facility and undertake field inspections to ensure compliance.</u></p>
<p>GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.</p>		<p>DELETED due coverage in SEZ Subelement and TMDL Implementation Subelement</p> <p>WQ2.9 Evaluate the feasibility and effectiveness of ponding facilities along stream corridors as a strategy for removing instream loads of sediment and nutrients.</p>	<p>← DO NOT DELETE.</p> <p>Evaluate the feasibility and effectiveness of <u>natural ponding along stream corridors outside of SEZ lands, without a net addition of coverage</u> as a strategy for removing instream loads of sediment and nutrients.</p>	<p>N/A</p>	<p>ADD as WQ Implementation Measure:</p> <p><u>Stream restoration projects must distribute stormwater over the largest area of the SEZ possible.</u></p>

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GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.		WQ-2.5 Reduce the impacts of motorized watercraft on water quality	WQ-2.5 <u>Establish an implementation schedule to greatly reduce the impacts of motorized watercraft on water, air quality, noise and threat and spread of invasive species.</u>	WQ.IMP-30 Staff Recommendation for Amending the Code of Ordinances: Existing Code language is considered adequate and No Code amendment updating or change is currently being recommended	
			ADD as WQ Policy: <u>Greatly reduce long and short term impacts of aquatic invasive species and treatment of invasive species on near shore water quality.</u>		ADD as WQ Implementation Measure: <u>Integrate monitoring program to track populations, new invasion sites, efficacy of boat inspections and efficacy of cleaning operations, to ascertain impacts on water quality, primary productivity and other near shore properties. Specifically monitor aquatic invasive species degradation to water quality.</u> ADD as WQ Implementation Measure: <u>Integrate project to reduce and remove AIS and prepare annual reports.</u> ADD as WQ Implementation Measure: <u>Phase in Tahoe only boats and enforce.</u> ADD as WQ Implementation Measure: <u>Institute all necessary control to ensure fishing equipment is free of AIS.</u>
			ADD as WQ Policy: <u>Create and improve code language to respond to benthic invertebrates as water quality indicators.</u>		ADD as WQ Implementation Measure: <u>Monitor water quality in relation to benthic invertebrates in Lake Tahoe and other lakes in the Basin. Monitor stream water quality in relation to benthic invertebrates and other native species.</u>
GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.		WQ-2.6 Implement new standards for source water protection zones around public groundwater wells. Source water protection for groundwater wells will be implemented based on a hydrogeologic analysis around those wells that includes an assessment of the soils saturated hydrologic conductivity and the groundwater's hydrologic time	WQ-2.6 Implement <u>updated and stricter</u> standards for source water protection zones around public <u>and private</u> groundwater wells. Source water protection for groundwater wells will be implemented based on a hydrogeologic analysis around those wells that includes an assessment of the soils saturated hydrologic conductivity and the groundwater's hydrologic time of travel. Public lake intake protection zones will be based	WQ.IMP-31 Staff Recommendation for Amending the Code of Ordinances: Comprehensively amend with minor language adjustments all sections of the Source Water Protection chapter.	WQ.IMP-31 DELETE – repeats IMP-1

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		of travel. Public lake intake protection zones will be based upon an assessment of the risks associated with adjacent shorezone uses.	upon an assessment of the risks associated with adjacent shorezone uses <u>and specific water quality monitoring results for pathogens.</u>		
GOAL WQ-2 human & environmental health: water quality standards in the lake Tahoe region must be consistent with the protection of human and environmental health.		WQ-2.7 Achieving stormwater treatment through soil infiltration can not create a significant risk to groundwater quality.	WQ-2.7 Achieving stormwater treatment through soil infiltration can not create a significant risk to groundwater quality <u>or result in nitrogen delivery to lakes or tributary waters in the Basin.</u>	WQ.IMP-32 Staff Recommendation for Amending the Code of Ordinances: Amend the Water Quality Control Chapter with focus on the Applicability and Discharge Limits Sections; special attention being given to the Discharges to Groundwater subsection. Amend the Grading Standards Chapter with focus on the Discharge Prohibitions and Excavation Limitations Sections; special attention being given to the Groundwater Interception and Excavation subsections. Consistency nexus will be required in the Grading and Construction Schedule Chapter with focus on the Grading and Construction Schedule section. Additional consistency language and nexus will be required for the BMP Requirements Chapter in the Standard BMP Requirements and Maintenance of BMPS sections. Additional updating and consistency language will be necessary in the Special Information Reports and Plans chapter with focus on the Subsurface Investigations and Reports section.	WQ.IMP-32 DELETE – repeats IMP-1
				<u>Non-Asphalt Incentive: Require the use of approved semi-pervious or pervious, non-asphalt materials and paving blocks in parking lots, sidewalks, and driveways when installed in existing unpaved disturbed areas in lieu of regular asphalt. Semi pervious pavement needs to be studied, promoted and considered as method to receive TMDL credit, especially for secondary roadways.</u>	

*Alternative 4 policy statements were prepared with the best publically available information from the TRPA and some of the information may be out-of-date. Additionally, according to TRPA staff, some details are lacking in Alternative 4 that may have been fully developed in Alternative 2.

**Similar to any RPU alternative, the Conservation Alternative needs to be subjected to the same rigorous environmental analysis to determine if its policies and implementation measures are sufficient for ETCC achievement and maintenance.

Italics identify policy or implementation that were revised as part of the Milestone process – it is unclear from the documents provided if the changes are in reference to Alt 2 or both Alt 2 and Alt 4.