

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Summary of Key Issues and Review of Alternatives

Chapter 11 Water Resources Element

Chapter 11 Water Resources Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p>Water Resources and Land Use. Planned land uses could trigger new water supply and quality impacts or exacerbate existing problems. How can the General Plan Update be used as an effective tool to ensure that new development occurs without damaging water resources on an individual and cumulative basis?</p> <p>Key Policies: WR-P4 (WR-S1, WR-S2, WR-IM1, WR-IM2), WR-P5 (WR-S1, WR-S3, WR-IM1, WR-IM2), WR-Px2 (WR-IMx2)</p>	<p>Includes policies for sustainable management of water resources (WR-P1), protection of existing surface and groundwater uses (WR-P2), identification of critical municipal water supply areas (WR-P3) and critical watershed areas (WR-P4), assessment of impacts of subdivision on water resources (WR-P6 and P7) as well as measures addressing erosion, sediment discharge (WR-P8), pathogens, and nutrient discharge (WR-P14 and WR-P15).</p>	<p>While the existing plan does not have a water resources element, it contains water resources and land use policies calling for land use decision to be consistent with water resource values, timing development with water supply and capacity, and considering existing uses during project review.</p>	<p>Same as Alternative B except that additional protections are provided for groundwater recharge areas and data new requirements for well permit applications to reduce groundwater contamination.</p>	<p>Alternative C would be the same as the Framework Plan and not adopt new water resources related policies, standards, or implementation measures.</p>
<p>Watershed Planning. Watershed planning includes an evaluation of land use activities, water</p>	<p>Proposes using watersheds as the geographic planning framework for water resource planning and coordination</p>	<p>Contains encouraging continued participation in</p>	<p>Same as Alternative B.</p>	<p>Same as Existing Framework Plan</p>

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Chapter 11 Water Resources Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p>supply and quality, and sources of pollution within a watershed and a plan to reduce pollution and accommodate land uses. What should be the approach in the General Plan Update for controlling sedimentation, preventing further increases in water temperature and preserving flow rates within watersheds in Humboldt County where these water parameters have been identified as watershed management issues?</p> <p>Key Policies: WR-P17 (WR-IM8, WR-IM11)</p>	<p>with other regional, state, and federal planning, implementation, and funding efforts (WR-P17 through WR-P20).</p>	<p>water resource planning efforts and encouraging water investigation by state and federal agencies,</p>		
<p>Public Water Supply. Domestic water is supplied by a variety of public agencies and private utilities. Humboldt County is not a water provider.</p> <p>What should be the County's role in managing</p>	<p>Includes measures for sufficient water supply for public systems, designation and regulation of water resources in Critical Water Supply areas, and a water conservation and re-use strategy (WR-P21 through WR-P23).</p>	<p>Includes policies regarding water conservation and development timing</p>	<p>Same as Alternative B</p>	<p>Same as Existing Framework Plan</p>

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Chapter 11 Water Resources Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
public water supplies for new development? Key Policies: WR-P22				
Water Exports. Water is diverted from the Klamath, Trinity, and Eel Rivers. Restoring river flows is important to the County's environment and economy. How should the County manage water rights with respect to water exports? Key Policies: WR-P27	Includes measures addressing restoration of flow rates, compliance with water code export laws, and consideration of county water needs in reviewing future water exports (WR-P24 through WR-P 29).	Alternative B water export policy similar to existing plan.	Alternative A would additionally specify that there be no new exports of water to locations outside Humboldt County unless the County has issued a Conditional Use Permit for such exportations (WR-P29). Also requires a re-balancing of considerations for dam relicensing (WR-P28).	Same as Existing Framework Plan
Stormwater. Stormwater management plays an important role in water quality and supply. How should the General Plan Update address stormwater management and plan for drainage facility infrastructure? Key Policies: WR-P38 (WR-IM26)	Includes policies and standards addressing drainage facilities, erosion and sediment control measures, storm drainage design, reduction of toxic runoff, and fish passage design (WR-P30 through WR-P40).	Contains polices relating to utilizing natural drainage courses, peak stormwater flows, and providing support for restoration projects	Alternative A, besides including all of the measures of Alternative B, also includes a requirement for use of Low-Impact Development standards in watersheds showing impairment from stormwater discharge.	Same as Existing Framework Plan

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

**Plan Alternatives Comparison Chart
Chapter 11 Water Resources Element**

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
11.4 Goals						
A	B			WR-G1. Water Supply, Quality, and Beneficial Uses. High quality and abundant surface and groundwater water resources that satisfy the water quality objectives and beneficial uses identified in the Water Quality Control Basin Plan for the North Coast Region.		R
				COMMENTS:		
A	B			WR-G2. Water Resource Habitat. River and stream habitat capable of supporting abundant <u>the recovery and continued viability of</u> salmon and steelhead populations.		M
				COMMENTS: This goal should reflect active recovery and viability of salmonid populations.		
		C	D	3360.1 To maintain or enhance the quality of the County's water resources and the fish and wildlife habitat utilizing those resources.		D
				COMMENTS:		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B			WR-G3. Planning, Coordination, and Advocacy. A system of local coordination and intra-regional cooperation to advance local, regional, and state water management priorities and objectives.		R
				COMMENTS:		
A	B			WR-G4. Watershed Planning Framework. Land use decision making that makes use of watersheds as a planning, management, and coordinating framework to cooperatively manage water and other <u>related</u> natural resources with local communities, neighboring counties, and state and federal agencies.		M
				COMMENTS:		
A	B			WR-G5. Watershed Management. A system of water resource management that recognizes watersheds as natural systems producing multiple economic, social, and environmental benefits that can be optimized with sound data, cooperative public processes, adaptive management, and leadership.		R
				COMMENTS:		
A	B			WR-G6. Public Water Supply. Public water systems able to provide adequate water supply to meet long-term community needs in a manner that protects other beneficial uses and the natural environment.		R
				COMMENTS:		
		C	D	3360.2 To maintain a dependable water supply, sufficient to meet existing and future domestic, agricultural, industrial needs and to assure that new development is consistent with the limitations of the local water supply.		D



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
A	B			WR-G7. Effective Conservation Strategies. Effective application of conservation, water re-use, and storage strategies in meeting year-round water supply needs in water supply limited areas.		M
				COMMENTS: These strategies are a benefit in all areas, not just those where supplies are currently limited.		
A	B			WR-G8. Restoration of River Flows. Sufficient Restoration of water flows in the Trinity, Klamath and Eel rivers to meet all beneficial uses, including support of salmon and steelhead recovery plans, recreational activities, and the economic needs of river dependent communities, and no additional upper or mid-level watershed exports from rivers flowing through the County.		M
				COMMENTS: Salmonid recovery should be supported in and of itself. It should be noted that salmonid recovery plans are not mentioned elsewhere in this chart. Also, for clarity, the issue of additional watershed exports should be addressed as a separate goal.		
A				WR-Gx. Water Exports. No additional watershed exports from rivers flowing through the County.		
				COMMENTS:		
A	B			WR-G9. Storm Drainage. Storm drainage utilizing landscape infiltration and natural drainage systems channels and watercourses watersheds and the minimum possible creating minimal while minimizing erosion, peak runoff from new development, stormwater pollution, and interference with surface and groundwater flows.	Edited for clarity.	M
				COMMENTS: Promoting stormwater infiltration into the landscape is an effective way to achieve groundwater recharge and minimize delivery of sediments and other pollutants into the County's waterways.		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
11.4 Policies - Water Resources and Land Use						
A	B			WR-P1. Sustainable Management. Ensure that land use decisions conserve, enhance, and manage water resources on a sustainable basis to assure sufficient clean water for beneficial uses and future generations.	 Leg, QJ	R
				COMMENTS:		
A	B			WR-P2. Protection for Existing Surface and Groundwater Uses. Impacts on existing beneficial water uses shall be considered and mitigated during discretionary review of land use permits that are not served by municipal water supplies. Compliance measures for un-permitted development not served by municipal water supplies shall include mitigations for surface or groundwater resource impacts.	 QJ, S4	R
				COMMENTS:		
		C	D	3361.1 Ensure that land use decisions are consistent with the long term value of water resources in Humboldt County.		D
				COMMENTS:		
		C	D	3361.3 Ensure that the intensity and timing of new development will be consistent with the capacity of water supplies.		D
				COMMENTS:		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
		C	D	3361.4 Existing water uses shall be considered during the review for new water uses.		D
				COMMENTS:		
A	B			WR-P3. Proactive Environmental Protections. Focus <u>educational efforts</u> , regulatory attention, <u>and proactive measures</u> in specified watersheds where limited water supply or threats to water quality have potentially significant cumulative effects on the availability of water for municipal or residential water uses or the aquatic environment.	 Leg, QJ, Min, IM1-2	M
				COMMENTS: Education and outreach should be employed along with better enforcement of watershed-health-related regulations to achieve Best Management Practices. The County should prioritize educational efforts and other proactive measures such as incentives. Where these proactive measures fail, we recognize the value of regulatory attention. Perhaps it would be appropriate to have a separate policy specifically addressing the need for educational programs.		
A	B			WR-P4. Critical Municipal Water Supply Areas. The Board of Supervisors shall designate all or portions of watersheds as "Critical Water Supply Areas" if cumulative impacts from land uses within the area have the potential to significantly impact the quality or quantity of municipal water supplies. Water resources within Critical Water Supply Areas shall be protected by the application of specific standards for such areas.	 Leg, QJ, S1-2, IM1-2	R
				COMMENTS:		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
A	B			<p>WR-P5. Critical Watershed Areas. The Board of Supervisors shall designate all or portions of watersheds as "Critical Watersheds" if cumulative impacts from land uses within the area have the potential to create, <u>or have created</u>, significant environmental impacts to threatened or endangered species, including <u>Chinook salmon</u>, Coho salmon or and steelhead <u>habitat</u>. Water resources within Critical Watersheds shall be protected by the application of specific standards for such areas to avoid the take of threatened or endangered species.</p>	 Leg,QJ S1,S3, IM1-2	M
				<p>COMMENTS: We fully support the intent of this policy. However, "Critical Watersheds" is a term defined and utilized by the EPA. Staff may want to check if use of this term is appropriate in this context.</p>		
A	B			<p>WR-P6. Subdivisions Demonstration of Sufficient Water Supply. Subdivision <u>and building permit</u> approval shall be conditioned to require evidence of sufficient water supply during normal and multiple dry years <u>drought conditions</u> to meet the projected demand associated with the proposed <u>project subdivision</u>. Sufficient water supply shall include the requirements of the proposed <u>subdivision project</u> and existing and planned future uses. Written service letters from a public water system written in conformance with this policy is sufficient evidence. <u>Subdivisions Projects</u> to be served through on-site water supplies or private water systems must provide evidence of sufficient water supply to the County Department of Environmental Health.</p>	 QJ, S6	M
				<p>COMMENTS: As with subdivisions that may result in increased water withdrawals, permit approval for new residential development should require demonstration of a sufficient year-round supply of water. Rainwater harvest and on-site storage should be encouraged to meet these needs.</p>		
		C	D	<p>3361.6 Projects must provide evidence of water availability prior to recordation of map.</p>		D
				<p>COMMENTS:</p>		


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B	<p>WR-Px1. Requirements for Water Storage in Temperature Impaired Watersheds. Require new development proposed <u>on properties</u> within in temperature-impaired watersheds <u>and critical watershed areas</u> that are not served by public water to install water storage tanks facilities capable of providing 100 percent of the Department of Fish and Game recommended adequate water storage volume <u>to meet water demand throughout the dry season</u>. Require, <u>where feasible</u>, the installation of rain catchment systems to <u>support supply</u> domestic and outdoor water needs <u>during low flow summer months</u>. <u>Proposed development that seeks to rely upon surface water or groundwater withdrawals from temperature impaired watersheds shall provide evidence of, or be conditioned to obtain, a forbearance agreement eliminating water withdrawals during low-flow conditions.</u></p>	 New Policy – This was a mitigation in the Housing Element (See H-IM36) and should be added in the GPU for consistency.	M
		<p>COMMENTS: Maintaining healthy stream flow is critical to retaining aquatic ecosystem function. Water diversions during the low-flow periods have resulted in cumulatively significant impacts on Humboldt County streams and rivers. Water harvest should be derived from rainfall events or during periods of higher water flows. Ideally, rain catchment would supply 100% of the properties water needs, but this may not be feasible in some situations. Forbearance agreements should be required for all new surface water and groundwater withdrawals in impaired watersheds. The Department of Fish and Game has flow standards that should be treated as critical minimums with regard to these agreements (see WR-S5). Storage capacity requirements should be based on what is needed during the dry season.</p>		
A	B	<p>RDWR-P7. Cumulative Impacts of Rural Subdivision. Cumulative impacts of water withdrawal from surface and groundwater sources and sewage disposal shall be assessed <u>during prior to</u> the zoning and subdivision of all areas not served by <u>municipal water supply</u> designated for Rural Development.</p>	Edited for clarity.  Leg, QJ, S6	M
		<p>COMMENTS:</p>		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B	<p>WR-P8. Erosion and Sediment Discharge. Ministerial and discretionary projects requiring a grading permit shall comply with performance standards adopted by ordinance and/or be conditioned to minimize erosion and discharge of sediments <u>from point and non-point sources</u> into surface runoff, drainage systems, and water bodies consistent with best management practices, <u>CASQA design, the State Water Board's Construction General Permit</u>, adopted Total Maximum Daily Loads (TMDLs), and non-point source other regulatory standards.</p>	 QJ, Min, S8	M
		<p>COMMENTS:</p>		
A	B	<p>WR-Px6. Private Road Maintenance. <u>All new roads shall be constructed to County standards (5 C's Manual) and maintained by a Road Maintenance Association. Issuance of a grading permit shall be conditioned upon an approved sediment management plan that incorporates Best Management Practices for road maintenance. For existing roads, the County shall coordinate with road maintenance associations to promote road-related best management practices.</u></p>		M
		<p>COMMENTS: <u>Private roads have the potential to negatively impact water quality if not properly maintained, and have been shown to be a significant problem in the way of sediment transport and delivery into sediment-impaired salmon-bearing waterbodies. We need policies that promote Best Management Practices for all roads throughout the County, not just facilities maintained by the County. The County should take a proactive role in promoting BMP's through educational opportunities and collaboration with road management associations and landowners. Santa Cruz County requires that grading permit approval be conditioned upon an approved erosion control plan. See also Santa Cruz's "Private Roads Maintenance Guide". It is crucial that the erosion control plan address maintenance during the wet-weather period.</u></p>		


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B	<p>WR-Px2. Mitigate Controllable Sediment Discharge Sites. Proposed Discretionary development applications for property that contain involving a sites identified as part of the TMDL Controllable Sediment Discharge Inventory shall be conditioned to mitigate sediment discharges include a plan to mitigate such discharges as part of the proposed project, which shall become a condition of project approval.</p>	 New Policy - Added based on comments from the RWQCB	R
		<p>COMMENTS: We support the above language as revised by staff on July 7th.</p>		
A	B	<p>WR-Px3. Continue to Implement Water Quality Regulations. Continue to implement Division 3, Building Regulations, Section 331-12, Grading, Excavation, Erosion, and Sedimentation Control Regulations, and Division 1, Planning Zoning Regulations Chapter 6 - General Provisions and Exceptions Section 314-61.1 Streamside Management Area Ordinance to protect water quality.</p>	 New Policy - Added for consistency with other sections of the GPU	R
		<p>COMMENTS:</p>		
A	B	<p>WR-P9. County Facilities Management. Design, construct, and maintain County buildings, roads, bridges, drainages, and other facilities to minimize stormwater runoff, erosion and the volume of sediment and other pollutants in stormwater flows.</p>	Prog, S9, IM4	M
		<p>COMMENTS:</p>		
A	B	<p>WR-P10. Project Design. Development should be designed to compliment and not detract from the aesthetics and function of rivers, streams, ponds, wetlands, and their setback areas.</p>	Min, QJ	R




HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
A	B			WR-P11. Small Micro Hydroelectric . Encourage small micro hydroelectric development when impacts to surface water flows and habitat are in conformance with state and federal standards.	Iss, QJ	M
				COMMENTS: Micro hydro is a term broadly understood with defined power production capabilities up to 100 kW and, as such, is more appropriate for individual home-sites. Small hydro is typically defined as installations that produce up to 10 megawatts (and may include up to 30 MW) which would have the capacity to power a small community or industrial facility.		
		C	D	3361.14. The development of environmentally sound small hydroelectric projects on publicly and privately owned lands in Humboldt County is generally encouraged. The County should only examine small hydroelectric project proposals for impacts not reviewed by other agencies and for overall consistency with the intent of the General Plan.		D
				COMMENTS:		
A	B			WR-P12. Groundwater Quality Protection . Commercial and industrial discretionary uses shall be evaluated for their potential to contaminate groundwater resources, and mitigated as necessary.	 QJ	R
				COMMENTS:		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative	Chapter 11 Water Resources Element			Staff Remarks/ Implementation	Position R, M, D
A			<p>WR-Px4. Well Permit Applications. Require that Information regarding the historic uses of the project site and contiguous surrounding lands be included as part of well permit applications and a map showing that identifies known contaminated sites within 500 feet of the property located near the project based on data available from the SWRCB Geotracker or successor website shall be included as part of well permit applications. as well a and a map that identifies known contaminated sites located near the project based on data available from the SWRCB website.</p>		R
			<p>COMMENTS: We support the above language as revised by staff on July 7th.</p>		
A			<p>WR-Px5. Important Groundwater Recharge Areas. Protect important groundwater recharge areas by limiting the construction of impervious surfaces and requiring that new development maintain pre-development infiltration rates. Areas mapped as important groundwater recharge areas are considered to be located within critical water supply or watershed areas.</p>	 <u>WR-S4, IMx3</u>	M
			<p>COMMENTS: The health of creeks and rivers are inextricably linked to groundwater supplies. Recharge areas are crucial for replenishing groundwater supplies that keep streams flowing during the dry summer months and maintain water temperatures cool enough for salmon to survive. It should be noted that the state legislature, through AB 359, is moving towards requiring local agencies to map and protect groundwater recharge areas. We support staff's recommended deletion of the last sentence so as not to limit the location of important recharge areas.</p>		
A B			<p>WR-P13. Saltwater Intrusion. For Discretionary projects involving municipal, or other large-scale agricultural groundwater withdrawals in proximity to coastal areas with a potential to create saltwater intrusion shall demonstrate in proximity to coastal areas, ensure that groundwater supplies will not be adversely affected by saltwater intrusion.</p>	 QJ	M
			<p>COMMENTS: We support the above language as revised by staff on July 7th. All projects with the potential to create saltwater intrusion should be assessed, not just municipal and agricultural uses. The permitting process needs to account for future sea level rise.</p>		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
A	B	<p>WR-P14. Pathogen and Nutrient Discharge from Septic Systems. Support programs <u>including the experimental sewage disposal program, and practices such as on-site greywater re-use</u> to reduce coliform bacteria and nitrate discharges from septic systems that do not meet operational standards established the North Coast Regional Water Quality Control Board. Work cooperatively with Environmental Health to assess the need for land use controls in areas where septic discharge threatens public health or beneficial uses.</p>	 Iss, Prog, IM7	M
		<p>COMMENTS: Greywater and compost toilet systems, if appropriately designed and installed, can safely and effectively minimize pathogen and nutrient discharge due to failing septic systems. The County should support the use of greywater and compost toilet systems in conjunction with septic systems to minimize contaminant discharge. (Given California's recently revised Greywater Code, it is now easier for a local agency to have a standardized permitting process that minimizes cost and effort involved. Unfortunately, in Humboldt County the permitting process is fairly complex and cost-prohibitive: to install a permitted system, a homeowner must first obtain an expensive permit from Environmental Health, arrange for multiple site visits and also obtain a permit through the Building Department. We recommend that the County modify the greywater permitting process in order to make it more accessible for individual households. The standards for household greywater system design can be found in the recently adopted Chapter 16A of the California Plumbing Code. The County should also consider updating their "experimental sewage disposal system" program to promote better system design and make permitting of appropriate systems more accessible.)</p>		
A	B	<p>WR-P15. Nutrient Discharge from Agricultural Operations. Support programs that <u>reduce minimize</u> nutrient discharge from agricultural operations, such as the voluntary manure management programs <u>supporting used by</u> local dairies.</p>	 Iss, Prog, IM27	M
		<p>COMMENTS: The County should have available information on manure management BMPs to prevent nutrient discharge.</p>		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
A	B			WR-P16. State and Federal Regulation. Encourage state and federal agencies to maintain responsibility for water resources supply and water quality management. The County shall not accept administrative responsibility for state or federal regulatory programs unless sustainable funding sources are secured.	Iss, Prog, IM6	R
				COMMENTS:		
		C	D	3361.2 Regulate development that would pollute watershed areas.		D
				COMMENTS:		
		C	D	3361.5 The availability of groundwater should be used as a prime factor in determining the desirable amount of residential development in a particular area in order to protect groundwater resources from depletion or contamination.		D
				COMMENTS:		
		C	D	3361.13 Ensure that projects located within state designated wild, scenic or recreational river basins are consistent with the guidelines in the State Wild and Scenic Rivers Act (as amended).		D
				COMMENTS: WR-S10 proposes similar language which we support.		
11.4 Policies – Watershed Planning						



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative			Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B		WR-P17. Watershed Planning. Use watersheds as the geographic planning framework for water resource planning and coordination with other regional, state, and federal planning, implementation, and funding efforts. Maintain relevant land use data on watershed basis to support watershed based management and decision-making processes. Encourage and support continued research, investigation, and analysis of the County's water resources by federal and state water resource agencies <u>and local watershed restoration groups</u> . Encourage compilation of data on a watershed basis.	 Iss, Leg, QJ, Prog, IM8, IM11-17	M
			COMMENTS:		
A	B		<u>WR-Pxx. Funding. Coordinate with local, state and federal agencies and conservation- and watershed restoration-related organizations to identify and obtain sources of funding for water quality enhancement, fish passage projects, stormwater pollution management, and water conservation efforts.</u>		R
			COMMENTS: The Water Resources Element identifies several ways of improving instream flows, habitat, and fisheries recovery but all proposed methods to improve water quality and fish habitat require funding mechanisms. To increase effectiveness, the County should work with non-profit organizations, public works departments, water districts, and state and federal agencies to leverage mitigation, proposition, and grant funds to accomplish the goals and objectives outlined in the Water Resources Element.		
A	B		WR-P18. Watershed and Community Based Efforts. Support the efforts of local community watershed groups to protect water resources and work with local groups to ensure decisions and programs take into account local priorities and needs.	 Iss, Prog, IM13, IM15	R
			COMMENTS:		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B			WR-P19. Regional Water Management Planning. Work on a regional basis through the North Coast Integrated Regional Water Management Plan (NCIRWMP) to ensure coordination and adaptive management between statewide water resource planning efforts, regional priorities, and local needs. The goals and objectives of the NCIRWMP shall be considered in establishing County water resource priorities and policy positions.	 Iss, Prog, IM9	R
				COMMENTS:		
A	B			WR-P20. State and Federal Watershed Initiatives. Support implementation of state and federal watershed initiatives such as the Total Maximum Daily Loads (TMDLs), the North Coast Regional Water Quality Control Board's (NCRWQCB) Watershed Management Initiative, and the California Non-Point Source Program Plan.	 Iss , IM10, IM13	R
				COMMENTS:		
		C	D	3361.8 Continue participation in all state, regional or local water resource planning efforts effecting surface run-off or groundwater supplies.		D
				COMMENTS:		
		C	D	3361.9 Encourage further investigation on the County's water resources by federal and state water resource agencies.		D
				COMMENTS:		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element		Staff Remarks/ Implementation	Position R,M,D
11.4 Policies – Public Water Supply					
A	B		WR-P21. Sufficient Water Supply. Support the actions and facilities needed by public water systems to supply the water demands projected in this Plan.	Iss, Prog, IM19, IM21	R
			COMMENTS:		
A	B		WR-P22. Critical Water Supply Areas. Coordinate with public water systems <u>and suppliers</u> in the designation and regulation of water resources in Critical Water Supply areas. <u>Ensure that expansion of these systems does not threaten surface and groundwater resources.</u>	Prog, IM21	M
			COMMENTS: The State Water Resources Control Board allocates withdrawals from the South Fork Eel River to water suppliers like Garberville SD and Redway CSD, but it is becoming apparent that those allocations, if fully drawn, would have a serious negative impact on both downstream water users and fish. Rather than relying on the state, Humboldt County should proactively work with public water systems to allocate water fairly to all users and with consideration for both short- and long-term effects upon fisheries.		
A	B		WR-P23. Conservation and Re-use Strategy. Promote the use of water conservation and re-use as a strategy to lower the cost, minimize energy consumption, and maximize the overall efficiency and capacity of public water systems. Encourage and support conservation for agricultural activities that increase the efficiency of water use for crop irrigation and livestock. <u>Encourage the installation of water storage, rain catchment and greywater systems to support domestic and outdoor water needs.</u> Support the use of treated water for irrigation, landscaping, parks, public facilities, and other appropriate uses and coordinate with cities and other wastewater treatment entities in planning uses and minimizing impacts for treated water in unincorporated areas. Avoid water reuse that could adversely affect the quality of	  Iss, Prog, IM22	M

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
				groundwater or surface water.		
				COMMENTS: On-site rainwater harvest, water storage, and greywater re-use are effective water conservation strategies that are equally appropriate rural areas and in areas served by municipal water supplies.		
		C	D	3361.7. Maximize the use of water conservation techniques appropriate for new and existing development.		D
				COMMENTS:		
11.4 Policies – Water Exports						
A	B			WR-P24. Restoration of Flow Rates. The County shall advocate for reductions in water exports and improved flow release <u>schedules</u> from existing reservoirs on the Trinity, Klamath and Eel rivers to <u>restore and</u> enhance fisheries, natural sediment transport, <u>water quality, and</u> recreational opportunities, <u>and other beneficial uses as identified in the Basin Plan.</u>	Iss, Prog, S12, S13, IM24	M
				COMMENTS: This policy should address the public’s rights under the public trust doctrine and area of origin law.		
		C	D	3361.11. Support flow release schedules from existing reservoirs that maintain or enhance the fisheries of those rivers.		D
				COMMENTS:		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative			Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B		WR-P25. Compliance with Water Code Export Law. Water export projects will not be <u>approved or</u> supported unless the specific requirements of California Water Code Section 10505 protecting development rights and Section 11460 protecting beneficial uses of the watersheds are met and substantiated through a scientifically based public process.	Iss, QJ, S12, S13	R
			COMMENTS: Staff's July 7 th revisions of this policy reflected the legal opinion that the County does not have the authority to approve exports. While this may be true, we believe the County does have the authority over land uses projects associated with water exports. As such, we support this policy as written.		
A	B		WR-P26. Impact Analysis. All new export proposals and renewal of licenses for existing water exports shall include a full assessment of impacts on the environment, economy, and water supply needs of the county.	Iss, S12, S13, IM24	R
			COMMENTS:		
A	B		WR-P27. County Needs. Any consideration of exporting additional water resources shall place primary priority upon the benefit of and need for the water resources in the County and shall ensure that water needed by water users and natural resources will not be exported outside the County.	Iss, S12, S13	R
			COMMENTS:		
	B		WR-P28. Public Trust Resources and Interests. The County shall advocate that dam relicensing projects effectively balance development values (electric power, flood control, and water supply) with non-developmental values (environmental resource protection, habitat restoration, and water quality), and other values that best reflect the public interest.	Iss, Prog, IM24	D
			COMMENTS:		


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A				WR-P28. Public Trust Resources and Interests. The County shall advocate that dam relicensing projects redress the historical over-emphasis on development values (electric power, flood control, and water supply) at the expense of non-developmental values (environmental resource protection, habitat restoration, and water quality).		R
				COMMENTS:		
A	B			WR-P29. Public Input. The County shall advocate for the relicensing applicant to sponsor a participatory process involving all affected stakeholders prior to the submittal of a final relicensing application to the Federal Energy Regulatory Commission.	Iss, S12, S13, IM24	R
				COMMENTS:		
A				WR-Px. <u>Water Export Facilities</u> No new exports of water to locations outside Humboldt County shall be permitted unless the County has issued a Conditional Use Permit for such exportations. Facilities such as pump stations and pipelines associated with exports of water to locations outside Humboldt County shall be required to obtain a Conditional Use Permit. In the event a permit is issued, it shall set forth with specificity the details of the exportations (e.g. quantity, origination location, destination location, period of exportation, etc.).	QJ, S12, S13	M
				COMMENTS: The County may not have authority to permit water exports, but the County does have oversight over associated land uses. Out-of-county water exports and land-uses related to such exports impose extra costs to the County because the water would no longer be available for in-county uses (either consumptive or instream). As such, the County should play a direct role in the permitting of export-related facilities.		
	C	D		3361.10. Large water export projects will not be approved or supported unless specific requirements and assurances are satisfied. These shall include the 1978 water policy statement policies regarding "Water Export Projects on Humboldt County Streams".		D




HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
				COMMENTS:		
11.4 Policies – Stormwater Drainage						
A	B			WR-P30. Natural Stormwater Drainage Courses. Natural drainage courses, including ephemeral streams, shall be retained and protected from development impacts which would alter the natural drainage courses, increase erosion or sedimentation, or have a significant adverse effect on flow rates or water quality. Natural vegetation within riparian and wetland protection zones shall be maintained to preserve natural drainage characteristics consistent with the Biological Resource policies. Storm water discharges from outfalls, culverts, gutters, and other drainage control facilities that discharge into natural drainage courses shall be dissipated so that they make no <u>cumulatively considerable significant</u> contribution to additional erosion and, where feasible, are filtered and cleaned of pollutants.	 Min, QJ, S14, IM25	M
				COMMENTS: Staff recommended specifying “significant” contributions to erosion. It should be pointed out that at an individual project level impacts may not seem “significant” but when considered in combination with other projects, the effect may be cumulatively significant. In sediment-impaired watersheds, any increase in sediment delivery is significant.		
		C	D	4235.2. Natural drainage ways shall be utilized where possible to convey drainage flows consistent with streamside management policies in the General Plan.		D
				COMMENTS:		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B			<p>WR-P31. Downstream Peak Flows. <u>Increased P₂ peak stormwater discharge associated with buildings, roads, and other land use practices</u> shall not exceed the capacity limits of off-site drainage systems or cause downstream erosion, flooding, habitat destruction, or impacts to wetlands and riparian areas. <u>Detention facilities shall be required to ensure that storm flows from the 100-year (Q₁₀₀) storm shall be detained so as to release water from the site at a rate no greater than the pre-development 2-year (Q₂) storm flows.</u></p>	 Min, QJ Edits based on Public Works standard conditions of approval	M
				<p>COMMENTS: This policy should address increases in peak stormwater discharge as a result of land-use activities.</p>		
		C	D	<p>4235.3. Drainage facilities shall be capable of passing a 10 year intensity storm without static head at entrance and passing a 100 year intensity storm without major damage.</p>		D
				<p>COMMENTS:</p>		
A	B			<p>WR-P32. New Drainage Facilities. Where it is necessary to develop additional drainage facilities, they shall be designed to be as natural in appearance and function as is feasible. All drainage facilities shall be designed to maintain maximum natural habitat of streams and their streamside management areas and buffers. Detention/retention facilities shall be managed in such a manner as to avoid reducing streamflows during critical low-flow periods.</p>	 Min, QJ	R
				<p>COMMENTS:</p>		
A	B			<p>WR-P33. Restoration Projects. The County shall encourage <u>and support</u> restoration projects <u>and other land management strategies</u> aimed at reducing erosion, <u>recharging groundwater</u>, and improving <u>existing</u> habitat values in Streamside Management Areas and wetlands.</p>	 lss	M



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
				COMMENTS:		
		C	D	3361.12. Support the development of fisheries enhancement projects on small Humboldt County streams.		D
				COMMENTS:		
A	B			WR-P34. Commercial and Industrial Activities. Commercial and industrial activities shall minimize, and eliminate to the extent possible, facility-related discharges to the stormwater system. As required by state codes and local ordinances, commercial and industrial stormwater discharge must be routed to a wastewater collection system; for example, minimizing runoff from vehicle maintenance yards, car washes, restaurants cleaning grease, contaminated mats/carts into storm drains, and other wash practices that result in materials other than plain water entering the storm drain system.	 Min, QJ, IM25	R
				COMMENTS:		
A	B			WR-P35. Oil/Water Separation. Parking lot storm drainage shall include facilities to separate oils from stormwater in accordance with Public Works requirements and the recommendations of the Stormwater Quality Association's California Stormwater Best Management Practices Handbooks or their equivalent.	 Min, QJ, IM25	R
				COMMENTS:		
A	B			WR-P36. Erosion and Sediment Control Measures. The following erosion and sediment control measures shall be incorporated into development design and improvements:	Item H recommended	R



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative	Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
	<p>A. Minimize soil exposure during the rainy season by proper timing of grading and construction;</p> <p>B. Retain natural vegetation where feasible;</p> <p>C. Vegetate and mulch denuded areas to protect them from winter rains;</p> <p>D. Divert runoff from steep denuded slopes and critical areas with barriers or ditches;</p> <p>E. Minimize length and steepness of slopes by benching, terracing, or constructing diversion structures;</p> <p>F. Trap sediment-laden runoff in basins to allow soil particles to settle out before flows are released to receiving waters; <u>and</u></p> <p>G. Inspect sites frequently to ensure control measures are working properly and correct problems as needed; and</p> <p>H. Allow for the construction of public roads, trails, and utilities, when properly mitigated.</p>	<p>for deletion because it isn't an erosion and sediment control measure and doesn't fit in this list.</p> <p> QJ, Min, S14, IM25</p>	
	<p>COMMENTS: We strongly support this policy.</p>		
<p>A B</p>	<p>WR-P37. Storm Drainage Design Standards. Drainage design standards for new development shall be adopted by ordinance. The design standards shall ensure that storms of specified intensity, frequency, and duration can be accommodated by engineered drainage systems and natural drainage courses.</p>	<p> Leg, Prog, IM25</p>	<p>R</p>
	<p>COMMENTS:</p>		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
B		<p>WR-P38. Storm Drainage Impact Reduction. <u>Develop and require the use of Low-Impact Development (LID) standards to reduce the quantity and increase the quality of stormwater runoff from new developments in watersheds with known significant cumulative impacts from stormwater runoff.</u> D For all other watersheds, develop storm drainage development guidelines with incentives to encourage Low-Impact Development (LID) standards to reduce the quantity and increase the quality of stormwater runoff from new developments.</p>	Prog, IM25-26	M or D
		<p>COMMENTS: Impermeable surfaces can greatly impact watershed health by preventing groundwater recharge, increasing peak flows, and transporting pollutants to waterways. In the interest of safeguarding all Humboldt County watersheds, we recommend requiring LID practices for all new development. At a minimum, LID should be required in already impaired watersheds with incentives for LID in all other areas.</p>		
A		<p>WR-P38. Storm Drainage Impact Reduction. Develop and require the use of Low-Impact Development (LID) standards to reduce the quantity and increase the quality of stormwater runoff from new developments in watersheds with known significant cumulative impacts from stormwater runoff.</p>		M
		<p>COMMENTS: See above comments</p>		
A	B	<p>WR-P39. Reduce Toxic Runoff. Minimize chemical pollutants in stormwater runoff such as pesticides, <u>fertilizers</u>, household hazardous wastes, and road oil by supporting education programs, household hazardous waste and used oil collection, street and parking lot cleaning and maintenance, use of bio-swales and other urban stormwater best management practices described in the California Stormwater Best Management Practices Handbooks or their equivalent.</p>	 Prog	M
		<p>COMMENTS: Why "urban" BMPs? Pollution prevention is important in both rural and urban areas. Herbicides, pesticides and other toxic chemicals should be discouraged particularly in sensitive habitats and riparian areas.</p>		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B			WR-P40. Fish Passage Designs. Work with federal and state agencies <u>and local watershed restoration groups</u> to retrofit existing drainage and flood control structures and design new structures to facilitate fish and other wildlife passage in partnership with federal and state agencies.	 Prog	M
				COMMENTS: It may be appropriate to incorporate an associated standard or implementation measure that addresses the identification, prioritization and retrofit of drainage/flood control structures that pose a barrier to fish passage.		
		C	D	4235.1. Drainage needs of each community shall be studied as part of each community plan.		R
				COMMENTS:		
11.5 Standards – Water Resources and Land Use						
A	B			WR-S1. Designation of Critical Water Supply and Watershed Areas. The designation by the Board of Supervisors of Critical Water Supply and Watershed Areas shall be a public process, involving a recommendation from the Planning Commission and input from the public, affected water providers, and state and federal agencies.	 Leg	R
				COMMENTS:		
		C	D	3362.2 A Critical Water Supply Area is defined as the specific area used by a municipality or community for its water supply system, which is so limited in area that it is susceptible to a potential risk of contamination from development activities.		D
				COMMENTS:		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B			WR-S2. Development within Critical Water Supply Areas. Ministerial land use development proposed within Critical Water Supply areas shall comply with performance standards adopted by ordinance. Discretionary development shall comply with performance standards and supplemental permit conditions. Standards and permit conditions shall require: 1) demonstrating that no risk of contamination to the water supply would occur due to the development activity; and 2) avoiding degradation of municipal water supplies by reducing cumulative impacts to surface water quality and water quantity during low-flow periods to below levels of significance.	 Min	R
				COMMENTS:		
		C	D	3362.3 Development proposed within Critical Water Supply Areas shall demonstrate that no risk of contamination to the water supply area would occur due to the development activity proposed.		D
				COMMENTS:		
		C	D	3362.4 Development within Critical Water Supply Areas shall utilize appropriate Erosion Control Measures including, but not limited to, those in the grading ordinance and this chapter.		D
				COMMENTS:		
A	B			WR-S3. Development within Critical Watershed Areas. Ministerial land use development proposed within Critical Watershed Areas shall comply with performance standards adopted by ordinance. Discretionary development shall comply with performance standards and supplemental permit conditions. Standards and permit conditions shall avoid take of endangered or threatened species by reducing cumulative impacts to aquatic habitat to below levels of significance.	 Min	R




HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative			Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
			COMMENTS:		
A	B		WR-S4. Protection of Groundwater Recharge Areas. Ministerial and discretionary development in Critical Water Supply or Watershed Areas where maintenance of groundwater recharge is determined to be necessary to maintain sustainable groundwater demands or surface water flows shall maintain or increase the site's pre-development absorption to recharge groundwater or be conditioned to reduce effects to water supplies to below levels of significance.	 Min, QJ	R
			COMMENTS:		
A	B		WR-S5. Surface Water Withdrawal Permitting. Ministerial and discretionary permits for land use development that include development of new in-stream water sources or other streambed alterations subject to California Fish and Game Code Section 1602 shall provide evidence of, or be conditioned to obtain a Streambed Alteration Agreement from the Department of Fish and Game <u>as well as a Water Right Permit or a small scale domestic use registration from the State Water Board. New development that seeks to rely upon surface water withdrawals from temperature impaired watersheds shall provide evidence of, or be conditioned to obtain, a forbearance agreement eliminating water withdrawals during low-flow conditions.</u>	 Min, QJ	M
			COMMENTS:		


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative			Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B		<p>WR-S6. Subdivisions Demonstration of Sufficient Water Supply. <u>Proposed buildings and subdivisions shall demonstrate sufficient water supply.</u> Demonstration of sufficient water supply shall include the requirements of the proposed subdivision, existing and planned future uses. Subdivisions subject to state requirements of SB 610 and SB221 shall make the appropriate demonstrations consistent with regulations (as amended) established by these acts. Written service letters from a public water system written in conformance with this policy is sufficient evidence. <u>Subdivisions Projects</u> to be served through on-site water supplies or private water systems must provide evidence of sufficient water supply to the County Department of Environmental Health.</p>	 QJ	M
			<p>COMMENTS: See WR-P6 and associated comments.</p>		
A	B		<p>WR-S7. Total Maximum Daily Loads (TMDLs) Implementation. Discretionary development within watersheds containing impaired water bodies as defined under Section 303(d) of the federal Clean Water Act and governed by TMDL pollution prevention <u>implementation</u> plans shall be conditioned to reduce or prevent further impairment consistent with applicable TMDLs.</p>	 QJ	R
			<p>COMMENTS:</p>		
A	B		<p>WR-S8. Erosion and Sediment Discharge. Ministerial and discretionary projects shall conform to grading ordinance standards, <u>CASQA design, the State Water Board's Construction General Permit, adopted Total Maximum Daily Loads (TMDLs), and other regulatory standards</u> for erosion and sediment control.</p>	 Min, QJ	M
			<p>COMMENTS:</p>		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B			WR-S9. County Facilities Management. The design, construction, and maintenance of County roads, bridges, drainages, and other facilities shall minimize <u>stormwater runoff</u> , erosion, and discharge of sediments <u>and other pollution</u> by following best management practices in accordance with the Five County Water Quality and Stream Habitat Protection Manual for County Road Maintenance in Northwestern California Watersheds (5C's Manual) or its equivalent.	 Prog	M
				COMMENTS:		
A	B			WR-S10. Projects in Proximity to Wild and Scenic Rivers. Projects located within state designated wild, scenic, or recreational river basins shall be consistent with the guidelines in the State Wild and Scenic Rivers Act as amended.	QJ	R
				COMMENTS:		
A	B			WR-S11. Small Micro Hydroelectric. Development of <u>small</u> run-of-the-river <u>micro</u> hydroelectric projects on privately owned lands are considered accessory to allowed uses if they are sized and designed to meet the electrical demands of the subject property only <u>and designed to avoid impacts to streamflow and fisheries.</u>	Min	M
				COMMENTS:		
		C	D	3362.8. Small hydroelectric projects for the purposes of this policy are defined as run of the river type diversions and existing impoundments with a maximum generating capacity of five (5) megawatts.		D
				COMMENTS:		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element		Staff Remarks/ Implementation	Position R,M,D
	C	D	3362.1. "Water Conservation Techniques" include but are not limited to, domestic and industrial low-flow water fixtures and native vegetation landscaping.		D
			COMMENTS:		
	C	D	3362.5. "Water Conservation Techniques" include but are not limited to, domestic and industrial low-flow water fixtures and native vegetation landscaping.		D
			COMMENTS:		
	C	D	3362.7. Development of fisheries enhancement projects should include: A. An immediate pilot project initiated on one of the Humboldt County streams for the express purpose of establishing the feasibility of small dams designated and operated only for fishery development and enhancement. B. Efforts designed to improve the anadromous fishery resources of Humboldt County streams. Specifically, the assessment of the natural capacities of the streams and identification of factors limiting production of anadromous fish. C. The use of Humboldt County Water Resources for the development of mariculture and aquaculture, with appropriate regulations to protect the native fish populations and the general public interests.		D
			COMMENTS:		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
11.5 Standards – Water Exports				
A	B	<p>WR-S12. Water Export Projects on Humboldt County Rivers. The Humboldt County Board of Supervisors, prior to giving its approval and support to export projects on county rivers, will require following information to demonstrate the export project's adherence to the requirements of California Water Code Section 10505 protecting development rights and Section 11460 protecting beneficial needs of the watersheds. The analysis of the export project shall include:</p> <p>A. Effects on in-stream flows including flood events.</p> <p>B. Assessment of the environmental impact of the proposed project using appropriate ecological studies by a team of independent experts, qualified to conduct such studies, funded by the project sponsor and completed before project authorization.</p> <p>C. Effects on fisheries and native wildlife habitat and restoration efforts. Analysis of the sustainability of any proposed fisheries and wildlife habitat mitigations.</p> <p>D. Impacts to Native American communities, including cultural and archaeological resources, economies, fisheries, and water supplies.</p> <p>E. Water supplies necessary to meet the ultimate future development needs of residential, agricultural, municipal, industrial, and recreational users and to promote environmental protection and fisheries habitat restoration.</p> <p>F. Cost and benefits to recreation.</p> <p>G. Water quality impacts and provisions for enhancement of any impaired water bodies</p>	QJ	R

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative	Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
	<p>(Section 303(d) of the federal Clean Water Act.</p> <p>H. Property tax and other fiscal or economic losses to local entities.</p> <p>I. Public infrastructure and service demands and costs including roads and recreation facilities.</p> <p>J. Public cost and benefits on statewide, regional, county, and local scales including the monetized value of impacted ecological services.</p>		
	<p>COMMENTS: Given the potentially significant consequences associated with water withdrawal and export, we strongly recommend this standard. As mentioned previously, although the county may not have authority to regulate water exports, we think it does have the authority to regulate export-related land-use projects.</p>		
<p>C D</p>	<p>3362.6. Water Export Projects on Humboldt County Streams. The Humboldt County Board of Supervisors, prior to giving its approval and support to large export projects on County streams, will require the following:</p> <p>A. Assurances must be given that each project constructed on any stream tributary to Humboldt County be designed and operated in a manner that provides maximum practical flood protection from the water flowing from the project consistent with the project purposes.</p> <p>B. Full recognition shall be given to the ecological impact of any proposed project. Appropriate ecological studies by a team of independent experts, qualified to conduct such studies, should be funded by the project sponsor and completed before project authorization.</p> <p>C. Absolute assurance must be given that funding will be made available for development and improvement of suitable fisheries above, and maintenance and</p>	<p>QJ</p>	<p>D</p>

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative	Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
	<p>improvement of native fisheries below, any project. Absolute assurance must also be given that funding will be made available for the effort to replace, restore, and maintain the native wildlife habitat destroyed or altered by any of the contemplated projects. The funding requirement for such development, improvement and maintenance of the fisheries and native wildlife habitat set forth herein above, shall be a funding requirement of the project and shall be identified as a commitment of the state, federal or local entity sponsoring the project. Recognition must also be given to the difficulty in accurately predicting long range financial requirements to meet the fisheries and wildlife policies set forth herein. Consequently, reappraisal and adjustments should be considered on five to ten year schedules throughout the projected project life in order to meet all of the funding requirements which may occur during the project life. Funding shall be provided for post project evaluation. Wildlife mitigation should be accomplished insofar as possible on existing public lands with prime consideration given to the wildlife resources involved and to its habitat requirements.</p> <p>D. Inasmuch as Native Americans comprise a large segment of Humboldt County's population with environmental and historical ties to some of the river valleys, assurances must be given prior to the construction of any water project that no Indian tribal lands, including burial, or ceremonial grounds in Humboldt County will be inundated without specific prior consultation with the Indian people concerned.</p> <p>E. Water supplies must be planned and financed as part of any project in sufficient quantity to provide ultimate future supplies of agricultural, municipal, industrial, recreational, and environmental water, and water for fisheries and wildlife habitat development. Recreational, and environmental water requirements (i.e., non-consumptive water requirements for the general public enjoyment including non-resident populations of tourists to north-western California) may well exceed consumptive uses in many hydrographic areas. Thus, the project sponsor must take an active role in providing such water and must absorb the burden of expenses for</p>		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative	Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
	<p>such water. Greater consideration of the values of non-consumptive water uses should be given when assessing the economic feasibility of water projects.</p> <p>F. Recreation land acquisition should be included in the project development, consistent with the project's purpose.</p> <p>G. Land acquisition should include provisions for exchange.</p> <p>H. Water quality control must be included as a specific purpose of the project.</p> <p>I. Projects which result in property tax loss to local entities shall have in-lieu taxes as a part of the project costs.</p> <p>J. The state must assume the non-federal recreational costs of a federal project. These costs must include the improvement of existing roads and development of roads required for the recreational development.</p> <p>K. If hydroelectric power is generated by a major water project using the water resources of the county, the county should be compensated for the sale of such power.</p> <p>L. Department of Fish and Game shall develop a flow release schedule to provide for the maintenance of the fishery resources and habitat. The project sponsor shall agree to provide the water for the release schedule.</p>		
	COMMENTS:		




HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
A	B	<p>WR-S13. Minimizing Effects of Water Exports. The County shall require that <u>prevent water exports not damage from damaging</u> the county's environmental and economic setting by ensuring that "no unreasonable effect" occurs in the transfer and withdrawal of water resources pursuant to Section 1810 of the State Water Code.</p> <p>County standards for defining "no unreasonable effect" include actions that will not:</p> <ul style="list-style-type: none"> A. Contribute to a decline in, <u>or interfere with the recovery of,</u> the population of any sensitive or protected plant, fish, or wildlife species. B. Reduce water levels in any existing public or private groundwater wells to levels that preclude withdrawal by existing users or would substantially increase the costs or such withdrawal. C. Contribute to any impacts on water quality that reduces water quality below health standards or federal or state water quality standards. D. Contribute to effects on water quality that would result in a deficiency by the water treatment agency's ability to treat water to appropriate standards. E. Reduce available groundwater or surface water resources to levels that would make access and/or use of these waters uneconomical for development planned in accordance with this General Plan. F. Directly or indirectly discharge contaminants into surface or groundwater resources. 	QJ	M
		<p>COMMENTS: We support staff's July 7th revisions to this standard. It is imperative that should water export occur it not interfere with salmonid recovery or the recovery of other threatened or endangered species.</p>		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
11.5 Standards – Stormwater Drainage						
A	B			WR-S14. Storm Water Management. All commercial, industrial, multi-family, quasi-public, and public parking facilities shall, whenever possible, provide stormwater treatment for parking lot runoff using bio-retention areas, filter strips, and/or other practices that be integrated into required landscaping areas and traffic islands. In all other cases, oil/water separators shall be required. A maintenance plan for oil/water separators shall be required.	 Min, QJ	R
				COMMENTS:		
11.6 Implementation Measures – Water Resources and Land Use						
A	B			WR-IM1. Critical Water Supply and Watershed Area Ordinance. Prepare and adopt an ordinance to implement Critical Water Supply and Watershed Area policies.	 Leg	R
				COMMENTS:		
A	B			WR-IM2. Critical Water Supply and Watershed Area Designation. Identify and designate Critical Water Supply and Watershed Areas through a zoning overlay process using best available scientific data, consultation with municipal water suppliers and resource agencies, and public outreach and input.	 Leg	R
				COMMENTS:		


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative			Chapter 11 Water Resources Element	Staff Remarks/Implementation	Position R, M, D
A	B		WR-IM3. Require Restoration of Degraded Areas. Require replanting of vegetation and remediation of erosion conditions in conjunction with related discretionary land use approvals, especially those including roads and grading on steep slopes.	 QJ	R
			COMMENTS:		
A	B		WR-IM4. County Facilities. The Department of Public Works shall manage and conduct internal reviews of County construction and maintenance activities to ensure conformance with adopted best management practices for <u>stormwater runoff, pollution,</u> erosion and sediment control.	 Prog	M
			COMMENTS:		
A	B		WR-IM5. Septic Systems. Actively pursue the abatement of failing septic systems. <u>Priority shall be given to septic systems</u> that have been demonstrated to represent a health and safety hazard.	Prog	M
			COMMENTS: Greywater and compost toilet systems, if appropriately designed and installed, can safely and effectively minimize pathogen and nutrient discharge.		
A	B		WR-IM6. Permitting Coordination. The County shall maintain efficient and timely procedures for project referral to the North Coast Regional Water Quality Control Board for review and consultation.	QJ	R
			COMMENTS:		
A	B		WR-IM7. Basin Plan Septic Requirements. Update and amend existing County septic regulations to reflect the latest Basin Plan standards for design and maintenance of on-site wastewater systems.	Leg	R


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
				COMMENTS:		
A	B			WR-IMx1. Update Water Quality Regulations. Amend the Grading, Excavation, Erosion, and Sedimentation Control Regulations and Division 1, Planning Zoning Regulations Chapter 6 - General Provisions and Exceptions Section 314-61.1 Streamside Management Area Ordinance to reflect the reflect the new erosion, sediment control, vegetation, restoration, and stormwater drainage policies and standards contained in the Water Resources Element, and the Biological Resources Chapter of the Conservation and Open Space Elements and evaluate as part of the five-year Housing Element Update to determine if additional measures are needed to protect water quality.	 New Implementation Measure - Added for consistency with other sections of the GPU	R
				COMMENTS:		
11.6 Implementation Measures – Watershed Planning						
A	B			WR-IM8. Watershed Planning. The County shall maintain relevant land use data on watershed basis to support watershed based management and decision-making processes.	Prog	R
				COMMENTS:		
A	B			WR-IM9. North Coast Integrated Regional Water Management Planning. The County shall participate in the continued update and implementation of the North Coast Integrated Regional Water Management Plan.	Prog	R
				COMMENTS:		





HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative			Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
A	B		WR-IM10. Total Maximum Daily Loads (TMDLs). Map impaired water bodies as defined under Section 303(d) of the federal Clean Water Act with associated impairment parameters, water quality objectives, and pollution budgets contained in TMDL pollution prevention implementation plans.	Prog	R
			COMMENTS:		
A	B		WR-IMx2. TMDL Controllable Sediment Discharge Inventory. Seek funding <u>and work with local watershed restoration groups</u> to inventory impaired watersheds to identify controllable sediment discharge sites and establish a program to prioritize, treat, monitor, and subsequently reevaluate such sites.		M
			COMMENTS:		
A	B		WR-IM11. Watershed Data. Seek and secure funding to evaluate the quality and quantity of water resources in each of the watershed basins. Support studies that correlate the quality and quantity of water captured, stored, and contained within watersheds to the needs of beneficial water uses by residents, local industry, agriculture, and the natural environment.	Prog	R
			COMMENTS:		


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative		Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
A	B	<p>WR-IM12. Groundwater Management Plans. Support the development of Groundwater Management Plans (California Water Code Section 10750 - 10756) for Critical Water Supply and Watershed Areas or in other areas where maintenance of groundwater recharge is determined to be necessary to maintain sustainable groundwater demands and the development of groundwater monitoring programs (California Water Code Section 10920 - 10933). The Board shall consider serving as the local public agency as defined by California Water Code Section 10752, and agency responsible for monitoring and reporting groundwater elevations as defined in California Water Code Section 10927 in areas within the County not served by a water service provider.</p>	 Leg Edits to WR-IM12 are based on changes in state law and current requirements	R
		<p>COMMENTS:</p>		
A		<p>WR-IMx3. Identification of Critical Groundwater Recharge Areas. Identify and map important groundwater recharge areas <u>through a zoning overlay process using best available scientific data, consultation with resource agencies, and public outreach and input.</u></p>		M
		<p>COMMENTS:</p>		
A	B	<p>WR-IM13. Water Planning and Coordination. Actively encourage and participate in local and state water resource planning efforts that have the potential to achieve Water Resource Element goals.</p>	 Prog	R
		<p>COMMENTS:</p>		
A	B	<p>WR-IM14. Watershed Planning with Public Land Managers. Participate in the planning activities of federal and state land management agencies to advocate for watershed-based planning and management approaches and policies and projects that are consistent with Water Resource Element policies.</p>	 Prog	R

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
				COMMENTS:		
A	B			WR-IM15. Coordinate and Support Watershed Efforts. Seek funding and work with land and water management agencies, community-based <u>local</u> watershed restoration groups, and private property owners to implement programs for maintaining and improving watershed conditions that contribute to improved water quality and supply.	 Prog	R
				COMMENTS:		
A	B			WR-IM16. Basin Plan. Work cooperatively with the North Coast Regional Water Quality Control Board and other interested parties in the update and implementation of Basin Plan policies and programs.	Prog	R
				COMMENTS:		
A	B			WR-IM17. Water Resources Funding. Work with public water suppliers, utility districts, stakeholder groups, and interested parties to seek and secure outside funding sources to implement this Element.	Prog	R
				COMMENTS:		
A	B			WR-IM18. Facility Construction. Coordinate with public water suppliers in the planning, development, and construction of the storage and transmission facilities needed to supply water pursuant to this Plan's policies, urban water management plans, water supply agreements, municipal service reviews, and programs to mitigate identified water quantity conditions, where applicable.	Prog	R


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
11.6 Implementation Measures – Public Water Supply						
A	B			WR-IM19. Water Facilities Consistency with the General Plan. Pursuant to the requirements of California Government Code, Sections 65400-65402, require public water suppliers—including cities, county-dependent districts, special districts, and other local public agencies—to consult with the County prior to acquiring a site or developing any well or facilities for public water supplies in the unincorporated area, by requesting a determination of the proposal's consistency with the General Plan.	QJ	R
				COMMENTS:		
A	B			WR-IM20. Technical Assistance Water Supply and Quality. Assist public water suppliers in the assessment of available water supplies and protection of water quality.	Prog	R
				COMMENTS:		
A	B			WR-IM21. Long-term Water Supply Planning. Work with Humboldt Bay Municipal Water District and other public water suppliers in the development and implementation of long-term plans for water supply, storage, and delivery necessary to first meet existing water demands and, secondly, to meet planned growth within the designated service areas, consistent with the sustainable yield of water resources.	Prog	R
				COMMENTS: The county should proactively work with public water suppliers to allocate water fairly to all users and ensure that expansion of their systems does not result in unmitigated impacts to surface and groundwater resources. (See comments on P22)		



HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative			Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
A	B		<p>WR-IM22. Promoting Water Conservation and Re-use. Maintain information resources for permit applicants <u>and the general public</u> on:</p> <p>A. Water-conserving design and equipment in new construction.</p> <p>B. Water conserving landscaping <u>and other land management practices measures.</u></p> <p>C. Water conserving retrofit options for existing buildings.</p> <p>D. Residential water re-use options including grey-water systems.</p> <p>E. Off-stream water storage systems <u>including tanks and ponds.</u></p>	 Prog	M
			<p>COMMENTS: The County should take a more active role in promoting water conservation and water-wise BMPs through education and outreach.</p>		
A	B		<p>WR-IM23. Urban Water Management Plans. Review and comment on Urban Water Management plans (California Water Code Sections 10610–10656) prepared by urban water suppliers.</p>	Prog	R
			<p>COMMENTS:</p>		
11.6 Implementation Measures – Importing and Exporting					
A	B		<p>WR-PIM24. Restoration of Flow Rates. The County shall actively participate in decision-making processes that affect water flows in the Trinity, Klamath, Eel, Mad and Van Duzen rivers to advocate for the goals and policies of this Plan.</p>	Corrected mis-labeling. Prog	R


HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R, M, D
				COMMENTS:		
11.6 Implementation Measures – Stormwater Drainage						
A	B			WR-IM25. Drainage Ordinance. The County shall develop and maintain an ordinance that regulates stormwater drainage consistent with the policies and standards of the Element.	 Leg	R
				COMMENTS:		
	B			WR-IM26. Low Impact Development Methods. <u>Require projects to utilize best management practices for Low Impact Development to meet surface water run-off standards in watersheds with known significant cumulative impacts from stormwater runoff.</u> Encourage discretionary projects <u>in all other watersheds</u> to utilize best management practices for Low Impact Development to meet surface water run-off standards.	Prog	M
				COMMENTS: <u>In the interest of safeguarding all of Humboldt County watersheds, we recommend requiring LID practices for all new development. LID should, at a minimum, be required in already impaired watersheds with incentives for LID in all other areas.</u>		
A				WR-IM26. Low Impact Development Methods. Require projects to utilize best management practices for Low Impact Development to meet surface water run-off standards in watersheds with known significant cumulative impacts from stormwater runoff.	 Leg	M
				COMMENTS: <u>See preceding comments.</u>		

HEALTHY WATERSHEDS WORKING GROUP

*****7/14/11 RECOMMENDATIONS*****

Plan Alternative				Chapter 11 Water Resources Element	Staff Remarks/ Implementation	Position R,M,D
A	B			WR-IM27. Nutrient Discharge from Agricultural Operations. Seek funding and support voluntary dairy manure management programs <u>and utilize other available programs to minimize nutrient discharge.</u>	 Prog	M
				COMMENTS: The County should have available information on BMPs related to livestock operations and potential impacts on water resources.		