

Toward a Sustainable Coast: Issues, Problems & Alternatives

Issue/Resource	Problems/Limitations	Opportunities/Solutions	Comments
Environmental Monitoring, Regulation & Enforcement	<ul style="list-style-type: none"> Fragmented and reactive protection procedures Severely limited funds & staffing Inadequate monitoring data & field science Insufficient coordination and use of research 	<ul style="list-style-type: none"> Implement permit review by watershed Augment EPD staff with peer review Complete study of in-stream flow needs Annual research agenda & status report 	Need substantial additional funding; raise application fees for permits, seek foundation grants for research. Use watershed-based analysis.
Land Consumption, Community Values, and Disturbance of Natural Areas	<ul style="list-style-type: none"> Increasing use of marginal lands Septic fields and other non-point source pollution Removal of natural vegetation, greenspace Insufficient buffering of state waters Market-driven effects reduce local character No cohesive means for protecting public values Fixed and low-income groups often taxed out Importance, value of natural resources and nature-based business poorly understood Emphasis on property value, not resources History of toxic releases, dumping 	<ul style="list-style-type: none"> Conduct land assessments; ID critical areas Provide local density bonuses for protecting sensitive/vulnerable areas Criteria for location/expansion of water & sewer, roads, schools, etc. to reduce sprawl Ordinances for protecting trees, greenspace Provide tech support for counties to assist in implementing soil erosion controls Create incentives for infill development Adopt ordinances for mixed land uses to create neighborhoods, not just subdivisions 	Conventional lot subdivision causes disproportional burden on land and water resources; analyzing features of prospective building sites at larger scale supports better use of land, reduced impact on natural resources. The value and marketability of natural features are poorly understood by many developers. Existing zoning imposes land-use dispersion, dependence on cars. Use of conservation easements is vital.
Wetlands, Fish Habitat & Related Resources	<ul style="list-style-type: none"> Health risks – fish-consumption advisories Poorly understood relationships between aquifers, recharge areas & surface water Declining fisheries health & diversity Conversion of wetlands via forestry, agriculture Evident loss of groundwater outflow Contaminants released throughout watershed Estuaries threatened, vital to most marine species 	<ul style="list-style-type: none"> Eliminate air deposition of mercury, SO2 Increase research of stream flow & groundwater recharge, distribution Improve aquifer recharge-area protection Expand sampling of water, tissue, sediment Restore vital wetlands by filling ditches Disperse wells; monitor natural outflows Permitting and assessment by watershed 	Federal legal loophole for non-conforming power-plant emissions must be closed. Septic systems must be routinely tested and buffer. Need baseline data, monitoring & evaluation of land cover, water quality, hydrology. Analysis of permits should include impacts on nature-based economic activities.
Water Supply & Water Quality	<ul style="list-style-type: none"> Concentrated withdrawals in urban areas Water use dominated by industrial demand Under-evaluated conservation potential Increasing inter-basin transfer proposals Agricultural irrigation inadequately monitored & rapidly increasing Demand met at growing risk to ecosystems 	<ul style="list-style-type: none"> Evaluate all conservation alternatives Estimate costs/benefits of conservation Coordinate withdrawal, discharge, water planning and conservation programs Develop new low-loss irrigation methods Explore markets for low-irrigation crops Determine in-stream flow requirements 	Existing conservation practices are limited and inadequately evaluated. Evaporation losses in conventional irrigation methods are enormous. Research & experiment with crop varieties, rotation, diversification, and scheduling to reduce irrigation. Integrated state water policy needed.
Job Creation & Economic Development	<ul style="list-style-type: none"> Under-evaluated development alternatives Community & environmental costs unknown Existing economic values poorly understood Actions not coordinated among jurisdictions 	<ul style="list-style-type: none"> Rate economic value of natural resources Establish & monitor performance criteria Definitive study of nature-based business 'Downstream' impacts must be evaluated 	Relationships between natural environment and economy tend to be undervalued despite their importance. More training & coordination needed