

**SSIRWMP
Draft Table of Contents
12/31/08**

NOTE: This proposed SSIRWMP outline will provide an opportunity to organize our existing information and concerns. It will also allow us to prioritize the funding we receive - not all sections of the Plan need to be developed at the same time.

The outline was developed by combining our existing list of goals/objectives and projects with the new Prop 84 requirements. All stakeholders are encouraged to add sections that reflect their concerns and/or to add notes about specific projects or issues that should be addressed within existing sections.

Section	Existing plans/data	Notes
I. Introduction		
<u>I.A. Context</u> I.A.1 Purpose of IRWMP I.A.2 Background of South Sierra regional effort		
<u>I.B Initial Planning Process</u> I.B.1 Stakeholders -I.B.1.a List of Stakeholders -I.B.1.b How Stakeholders were identified and invited to participate -I.B.1.c Facilitating Stakeholder involvement -I.B.1.d Demonstration that all necessary agencies/entities were involved in planning process I.B.2. Initial Planning Committee I.B.4 Initial Coordinating Committee		
<u>I.C. Relationship with local Planning entities</u> I.C.1 How IRWM Plan relates to planning documents and programs established by local agencies I.C.2 Description of the dynamics between the IRWM plan and local planning documents I.C.3 Relationship between IRWM entities and local planning entities (current and proposed)		
II. SSIRWMP Planning Process		
<u>II.A. Selection of Region</u> II.A.1 Brief description of region II.A.2 Rationale behind selection of regional boundaries - why this is an appropriate area for integrated regional water management II.A.3 Process of refining regional boundaries II.A.4 Neighboring IRWM efforts, overlap and coordination	Maps:	Rationale: Water supplier vs. water user. Process: Start with SNEP boundaries, modify based on needs/concerns of adjacent regions, existing projects, etc.
<u>II.B. Planning Oversight and Implementation</u> II.B.1 Regional Water Management Group II.B.2 Regional IRWM Planning Committee II.B.3 MOU -II.B.3.a How developed -II.B.3.b What it covers II.B.4 JPA with Funding Area		
<u>II.C. Vision, Goals and Objectives</u> (for developing plan)		
III. Existing Plans and Studies, Data Gaps Analysis		
<u>III.A Existing Plans – List</u> III.A.1 County General Plans		

<p>III.A.2 Groundwater Management Plans III.A.3 Public Land Management Plans III.A.4 District/Tribal Plans III.A.5 Studies III.A.6 State Water Plans</p>		
<p><u>III.B Data Areas (brief descriptions)</u> III.B.1 Hydrology -III.B.1.a Groundwater configuration -III.B.1.b Groundwater quantity III.B.2 Topography III.B.3 Soils III.B.4 Climate -III.B.4.a Rainfall -III.B.4.b Climate Change III.B.5 Habitat -III.B.5.a Areas of special biological significance/key corridors -III.B.5.b Invasive species -III.B.5.c Wetlands III.B.6. Fish and Wildlife III.B.7 Land Use and Cover -III.B.7.a Developed Land Use -III.B.7.b Vegetation Cover -III.B.7.c Public Land Ownership and Use III.B.8. Water Quality -III.B.8.a Groundwater -III.B.8.b Surface Water III.B.9. Water Demand and Supply III.B.10 Flood Hazards and Protection III.B.11 Fire Hazards and Protection III.B.12 Infrastructure -III.B.12.a Water Supply -III.B.12.b Wastewater -III.B.12.c Disadvantaged Communities III.B.13 Recreation III.B.14 Energy and Power Generation III.B.15 Socio/Economic Information III.B.16 Air Quality</p>		
<p><u>III.C. Data Gaps Analysis</u> III.C.1 Data analysis (refer Bobby's chart of existing plan data, included in appendix) III.C.2 Data Gaps – List by subject -III.C.2.a -III.C.2.b -III.C.2.c -III.C.2.d -III.C.2.e III.C.3 Prioritizing Data Gaps to be filled through IRWMP plan III.C.3.a Process of prioritization III.C.3.b Priorities</p>		
<p><u>III.D Technical Analysis</u> – Discussion of data, technical methods and analyses used to develop IRWM plan</p>		
<p>IV. Regional Conditions/Description</p>		
<p>IV.A Watersheds and Water Systems</p>		

IV.A.1 Watersheds IV.A.2 Water Suppliers IV.A.3 Hydrology		
IV.B Topography		
IV.C. Soils		
IV.D. Climate IV.D.1 Rainfall IV.D.2 Snowpack IV.D.3 Climate Change		
IV.E Vegetation IV.E.1 Vegetation type IV.E.2 Vegetation Cover		
IV.F Land Use and Development IV.F.1 Developed Land Use IV.F.2 Future Growth and Development IV.F.3 Public Land Ownership and Use		
IV.G Socio/Economic/Cultural Information IV.G.1 Population Distribution IV.G.2 Demographics IV.G.3 Employment IV.G.4 Disadvantaged Communities IV.G.5 Important Cultural/Social Values IV.G.6 Economic conditions and trends		
IV.H Internal Boundaries IV.H.1 Counties/Municipalities/Tribes IV.H.2 Service areas of water/wastewater agencies/districts IV.H.3 Groundwater basin boundaries IV.H.4 Public lands		
V Water Quality		
V.A. Groundwater V.A.1. Naturally occurring contaminants V.A.2. Contamination from human activities		
V.B Surface Water V.B.1. Contamination from human use -V.B.1.a Septic systems -V.B.1.b Sewer Treatment Plants V.B.2. Contamination from Agriculture -V.B.2.a Run-off from cattle pastures -V.B.2.b Run-off from crops, orchard, etc -V.B.2.c Persistent organics -V.B.2.d Riparian protection from livestock V.B.3. Sedimentation -V.B.3.a From Roads -V.B.3.b From Development -V.B.3.c From Fires -V.B.3.a Sediment build-up in storage facilities V.B.4 Impaired water bodies		
V.C. Drinking Water V.C.1 Water Quality and Treatment -V.C.1.a Naturally occurring contaminants -V.C.1.b Human caused contaminants --V.C.1.b.i Bacteria --V.C.1.b.ii Caffeine --V.C.1.b.iii Insecticides/pesticides --V.C.1.b.iv Air deposition (acid rain, organics)		
V.D. Issues and Recommendations V.D.1 Issues and strategies		-BMPs related to agriculture, silviculture, human use

V.D.2 Recommendations – Studies		-Establish sewers where failing septic systems are causing impacts
V.D.3. Recommendations – Projects		
V.D.4. Recommendations – Monitoring		
VI Water Supply and Demand		
<u>VI.B Water Supply</u> VI.B.1 Surface Water VI.B.2 Groundwater VI.B.3 Reclaimed/recycled water -VI.B.3.a opportunities for use -VI.B.3.b grey water policies VI.B.4 Agricultural Water Use Efficiency -VI.B.4.a agricultural water accounting and environmental water banks -VI.B.4.b agricultural land retirement VI.B.5 Urban Water Use Efficiency -VI.B.5.a rain gardens/barrels, bioretention -VI.B.5.b drought tolerant landscaping VI.B.6 Imported water (N/A?) VI.B.7 Desalted Water (N/A)		-Assessment of groundwater resources in key areas (Shaver Lake, Montgomery Ranch, Yokohl Valley, Springville) -Assessment of regional groundwater resources (fractured rock capacity). -Protection of Karsts and springs, tubes/caves
<u>VI.C Water Demand</u> VI.C.1 Residential VI.C.1 Agricultural VI.C.3 Industrial VI.C.4 Environmental VI.C.5 Out of region		
<u>VI.D Water Storage</u> VI.D.1 Groundwater recharge -VI.D.1.a minimizing impervious surface cover -VI.D.1.b groundwater recharge facilities -VI.D.1.c protecting natural recharge VI.D.2 Groundwater Storage - Conjunctive Use VI.D.3 Surface Water Storage -VI.D.3.a existing storage facilities -VI.D.3.b proposed new facilities - list -VI.D.3.c benefits and costs VI.D.4 Community Water Storage -VI.D.4.a public education, care of wells, septic systems -VI.D.4.b ditch company withdrawal of water from streams and storage in ponds		(include Poso Creek, Tule Tribe, Lewis Creek, Temperance Flat)
<u>VI.E Relationship between Resource and Use</u> VI.E.1 Comprehensive land use planning VI.E.2 Minimum well production requirements for development		
<u>VI.F Issues and Recommendations</u> VI.F.1 Issues and strategies VI.F.2 Recommendations – Studies VI.F.3 Recommendations – Projects VI.F.4 Recommendations – Monitoring		Note – Make sure to include strategies listed in Prop 84:
VII Infrastructure		
<u>VII Infrastructure</u> VII.A Water Supply VII.B Wastewater VII.C Disadvantaged Communities VII.C. Operations and Maintenance VII.E Issues and Recommendations VII.E.1 Issues and strategies VII.E.2 Recommendations – Studies		-Look at infrastructure in terms of efficiency (line canals, fix leaky pipes). -Make sure communities (particularly disadvantaged communities) are served (Tule River Tribe, Bod Fish, Weldon, Kernville). -Look at assistance with operation and maintenance of infrastructure.

VII.E.3 Recommendations – Projects		
VII.E.4 Recommendations – Monitoring		
VIII Air Quality		
VIII.A Air Quality Zones		Note – Make sure to include strategies listed in Prop 84:
VIII.B Contaminants and sources		
VIII.C Issues and Recommendations		
VIII.C.1 Issues and strategies		
VIII.C.2 Recommendations – Studies		
VIII.C.3 Recommendations – Projects		
VIII.C.4 Recommendations – Monitoring		
IX Habitat/Fish and Wildlife		
<u>IX.A Fish and Wildlife</u>		
IX.A.1 Significant aquatic biological features		
IX.A.2 Significant terrestrial biological features		
IX A.3. Threatened/Endangered Species		
-IX A.3.a List of species of concern		
-IX A.3.b Priority species for management		
<u>IX B Invasive Species</u>		
IX.B.1 Terrestrial plants		
-IX.B.1.a List of invasive species		
-IX.B.1.b Priorities for management		
IX.B.2 Aquatic plants		
-IX.B.2.a List of invasive species		
-IX.B.2.b Priorities for management		
IX.B.3 Terrestrial insects/animals		
-IX.B.3.a List of invasive species		
-IX.B.3.b Priorities for management		
IX.B.4 Aquatic insects/animals		
-IX.B.4.a List of invasive species		
-IX.B.4.b Priorities for management		
<u>IX.C Areas of special biological significance</u>		
IX.C.1 Riparian habitat		-Sycamore Alluvial woodland
-IX.C.1.a list of sites – areas of concern		-Fencing cattle from streams and rivers
-IX.C.1.b priorities for management		
IX.C.2 Native grasslands		Tule River Indian Reservation
-IX.C.2.a list of sites – areas of concern		
-IX.C.2.b priorities for management		
IX.C.3 Meadows		
-IX.C.3.a list of sites – areas of concern		
-IX.C.3.b priorities for management		
IX.C.4 Oak Woodlands		Canyon live oak woodlands
-IX.C.4.a list of sites – areas of concern		
-IX.C.4.b priorities for management		
IX.C.5 Wetlands		Alluvial, delta-like floodplain areas
-IX.C.5.a list of sites – areas of concern		Kelso creek flood corridor
-IX.C.5.b priorities for management		
IX.C.6 Vernal Pools		
-IX.C.6.a list of sites – areas of concern		
-IX.C.6.b priorities for management		
IX.C.7 Key wildlife/plant/insect corridors		Upper Deer Creek Watershed, Condor Preserve
-IX.C.7.a list of sites – areas of concern		in Blue Ridge, Sequoia Kings National Park,
-IX.C.7.b priorities for management		Continuous Blue Oak woodland corridor
IX.C.8 Healthy rivers		Golden trout wilderness, Little Kern Golden
-IX.C.8.a list of sites – areas of concern		Trout, Kern River Preserve
-IX.C.8.b priorities for management		Flow augmentation, gravel augmentation,
IX.C.9 Forests		passage and floodplain connectivity.
-IX.C.9.a list of sites – areas of concern		Giant Sequoia groves
-IX.C.9.b priorities for management		

IX.D. Conservation Opportunities IX.D.1 List/map of existing easements/mitigation banks IX.D.2 Opportunities for additional easements/mitigation banks IX.D.3 Agricultural land stewardship IX.C.7 Preservation of strategic farmland		
IX.E Issues and Recommendations IX.E.1 Issues and strategies IX.E.2 Recommendations – Studies IX.E.3 Recommendations – Projects IX.E.4 Recommendations – Monitoring		
X Flood Hazards and Protection		
X.A Stormwater Flood Hazards X.A.1 Stormwater Management X.A.2 Land use policies – building in flood plains X.A.3 Floodplain preservation and development -X.A.3.a list of key floodplains -X.A.3.b opportunities for development		Divert runoff from Kings River into SJ River Minimize run-off from developed areas Kings, Kaweah, Tule
X.B Flood Protection Facilities		Check dams, raise levees
X.C Erosion and Landslide Hazards		
X.D Issues and Recommendations X.D.1 Issues X.D.2 Recommendations – Studies X.D.3 Recommendations – Projects X.D.4 Recommendations – Monitoring		Note – Make sure to include strategies listed in Prop 84:
XI Fire Hazards and Protection		
XI.A Wildfire Risk Classifications		
XI.B Fire History		
XI.C Fuel Management		
XI.D Responsibility and Mutual Aid		
XI.E Land Use Policies		
X.F Issues and Recommendations X.F.1 Issues and strategies X.F.2 Recommendations – Studies X.F.3 Recommendations – Projects X.F.4 Recommendations – Monitoring		Note – Make sure to include strategies listed in Prop 84:
XI Recreation and Cultural Resources		
XI.A Recreational Facilities XI.A.1 Water dependent recreation XI.A.2 Impact of recreation on water quality XI.A.3 Educating recreational users		Include upper and lower Kern, Tule River, Middle San Joaquin, Shaver, foothill and mountain waterways Vacationers from cities, boaters, anglers, OHV
XI.B. Cultural Resources		Antiquities
XI.C Issues and Recommendations XI.C.1 Issues and strategies XI.C.2 Recommendations – Studies XI.C.3 Recommendations – Projects XI.C.4 Recommendations – Monitoring		
XII Energy and Power Generation		
XII.A. Role of Hydroelectric Generation to water resources		
XII.B Energy efficiency and alternative energy sources		
XIII Climate Change		
XIII.A Major impacts anticipated XIII.A.1 Rainfall		

XIII.B.2 Snow Pack		
<u>XIII.B Adaptability of water management system to anticipated changes</u>		
<u>XIII.C Issues and Recommendations</u> XIII.C.1 Issues and strategies XIII.C.2 Recommendations – Studies XIII.C.3 Recommendations – Projects XIII.C.4 Recommendations – Monitoring		Precipitation enhancement
XIV Water Policy, Resolving Conflicts		
XIV.A Conflicts re Water Rights XIV.A.1 Pre-1914 rights XIV.A.2 Modification of holding contracts XIV.A.3 Tribal water rights		
XIV.B Conflicting demands		Agriculture, development, habitat Upstream vs. downstream
XIV.C Consistency in regional water policies		Water supply for development
XIV.C Water Transfers		
XV Integrated Strategies		
<u>XV.A Understanding Resources</u> XV.A.1 Mapping projects XV.A.2 Watershed Health Assessments		
<u>XV.B Multi-Benefit Strategies</u> XV.B.1 Flood Control/Environmental Restoration XV.B.2 Groundwater recharge/habitat protection XV.B.3		
XV.C Data/Information Integration		
XV.D Regional Planning Integration		
XV.E Stakeholder/Institutional Integration		
XV Plan Management and Governance		
<u>XV.A. IRWM Objectives</u> XV.A.1 Objectives (measurable) XV.A.2 How Objectives were selected		
<u>XV.B Plan Governance</u> XV.B.1 Governance Structure XV.B.2 Decision-making XV.B.3 Equal access and participation XV.B.4 Internal and external communication XV.B.5 Interim and formal changes XV.B.6 Long term implementation of Plan		
XV.C Project/Objective Review and Prioritization - Process		Look at Prop 84 requirements for project review
XV.D Updating/Amending Plan		
<u>XV.E Monitoring Plan Performance</u> XV.E.1 Metrics used to evaluate project/plan performance XV.E.2 Obtaining Plan objectives XV.E.3 Stakeholder outreach and involvement XV.E.4 Monitoring systems to gather performance data XV.E.5 Mechanisms to adapt project operations and plan implementation based on performance data collected		
<u>XV.F Data Management</u> XV.F.1 Data Management Process for Region XV.F.2 How data collection systems and		

management protocols will be shared throughout region XV.F.3 How data management system will support local planning efforts XV.F.4 How data will be shared with State agencies XV.F.5 Public education and outreach		
XVI Coordination and Collaboration		
<u>XVI.A. Collaboration Opportunities within Region</u> XVI.A.1 Relationship with region's Planning Entities (current and future) XVI.A.2 Partnerships developed during planning process XVI.A.3 Coordinated monitoring XVI.A.4 Public education and outreach		-Regional coordination for habitat enhancement -Prioritization model that will rank restoration and enhancement projects -Adaptive management framework for monitoring feedback and planning future projects
<u>XVI.B. Coordination outside Region</u> XVI.B.1 State/federal agencies important to implementation of plan -XVI.B.1.a List of Agencies and roles -XVI.B.1.b Areas where agencies can assist with communication, cooperation or implementation -XVI.B.1.c State/federal regulatory decisions required for plan or project implementation XVI.B.2 Coordination with neighboring IRWM efforts		
XVII Initial Plan Benchmarks and Milestones		
XVIII.A Projects		
XVIII.B Studies		
XVIII.C Collaboration		
<u>XVIII.D Funding and Resources</u> XVIII.D.1 Potential local funding and grant opportunities XVIII.D.2 Certainty, magnitude and longevity of potential funding – effects on plan implementation XVIII.D.3 Covering Operation and Maintenance costs		
XVIII.E Ongoing Governance		
XIX Potential Impacts and Benefits of Plan Implementation		
XIX.A Potential benefits and impacts from regional plan vs. individual local efforts		
XIX.B Potential benefits/impacts within IRWM plan region		
XIX.C Potential benefits/impacts to other management regions		
XIX.D Potential interregional impacts and benefits		
XIX.E Potential impacts and benefits to non-water resources (air quality, energy, etc.)		