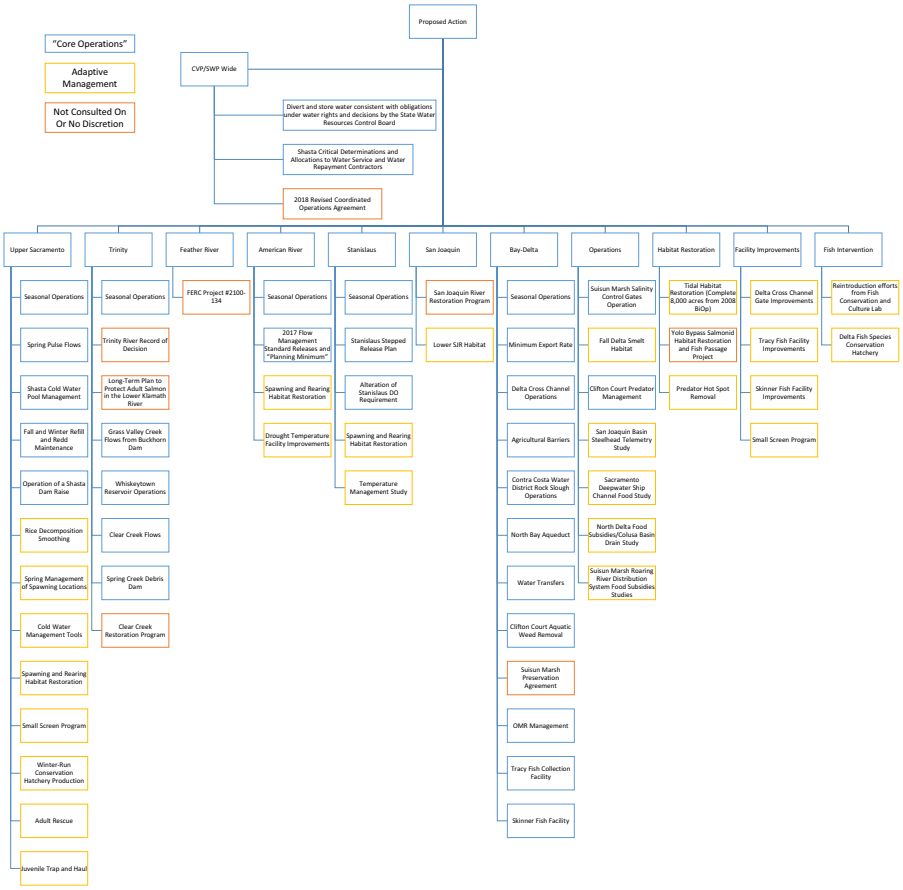
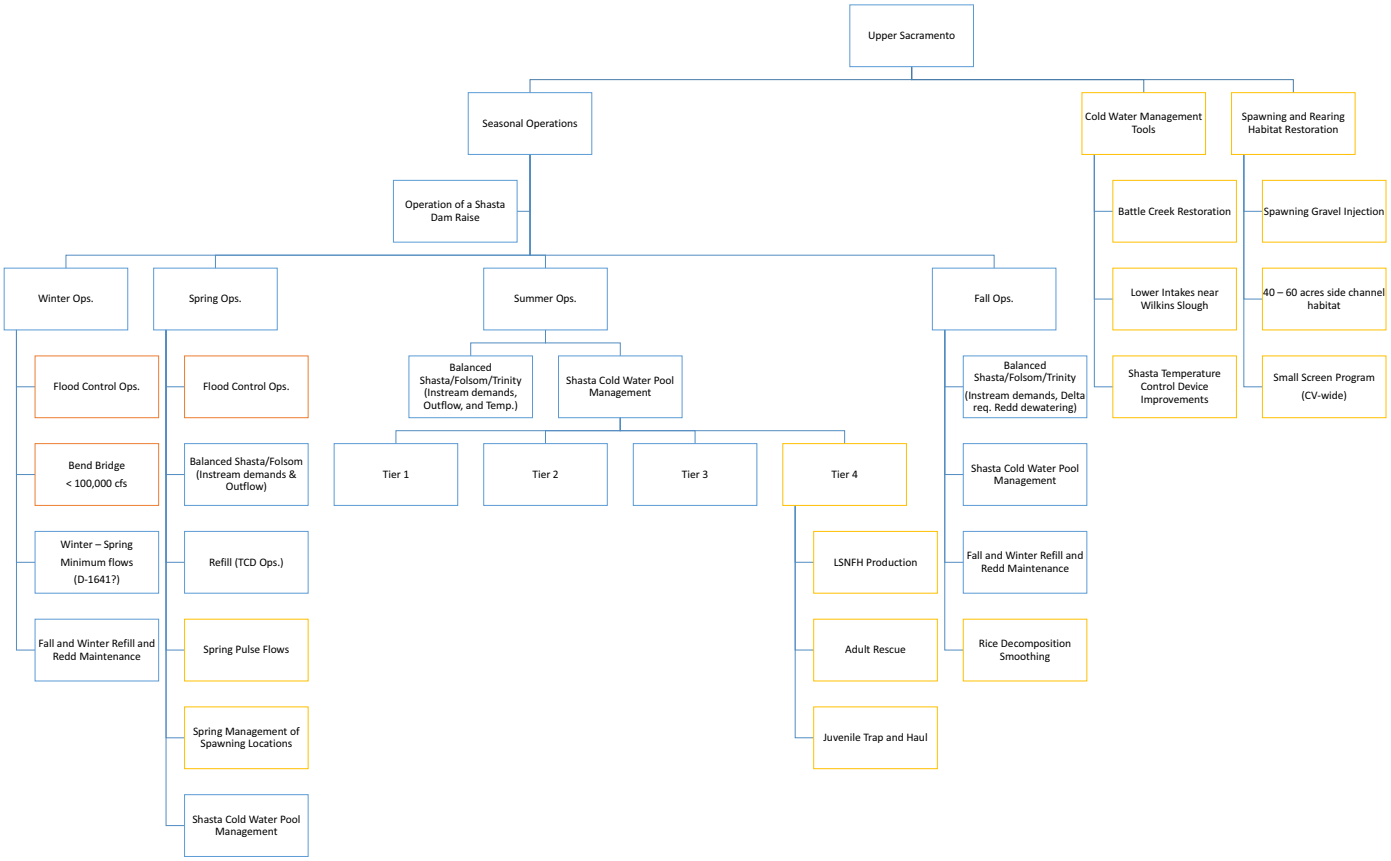
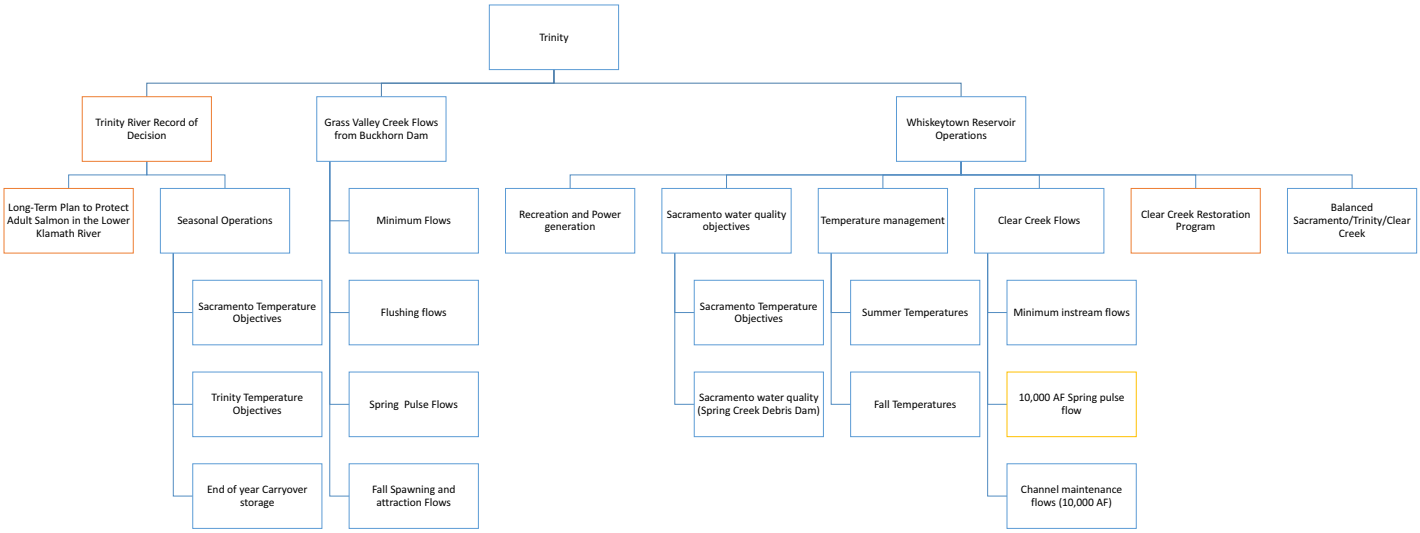
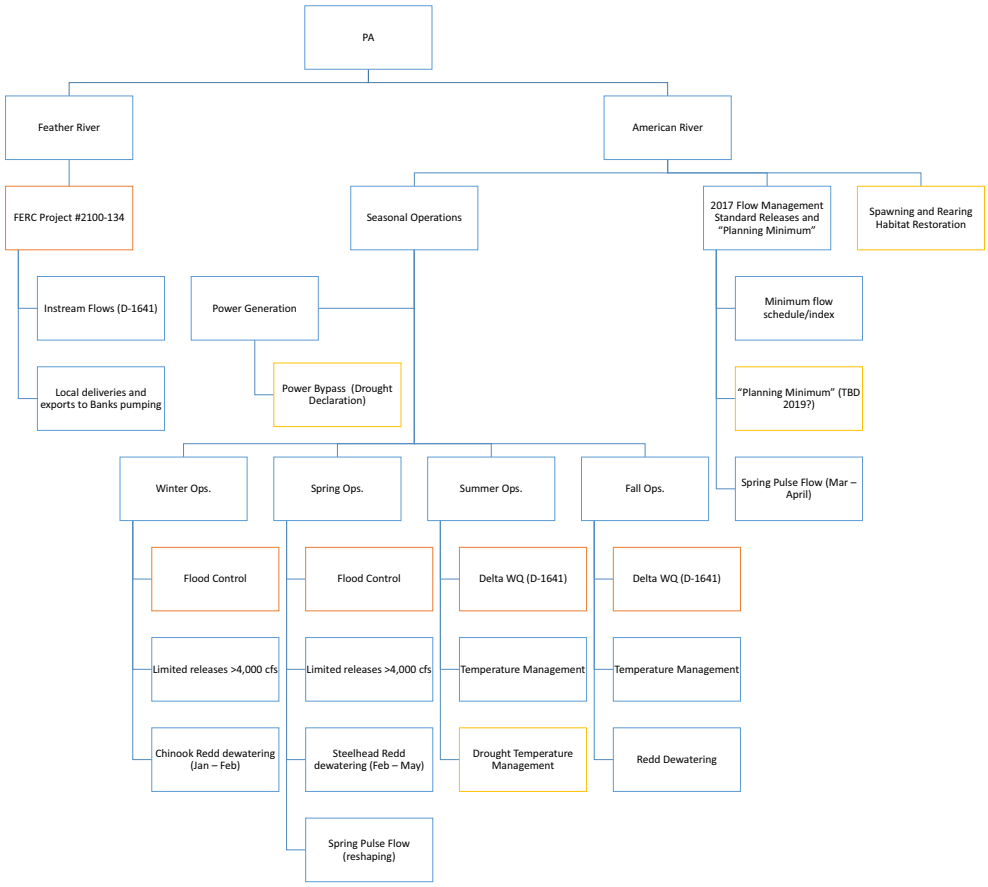
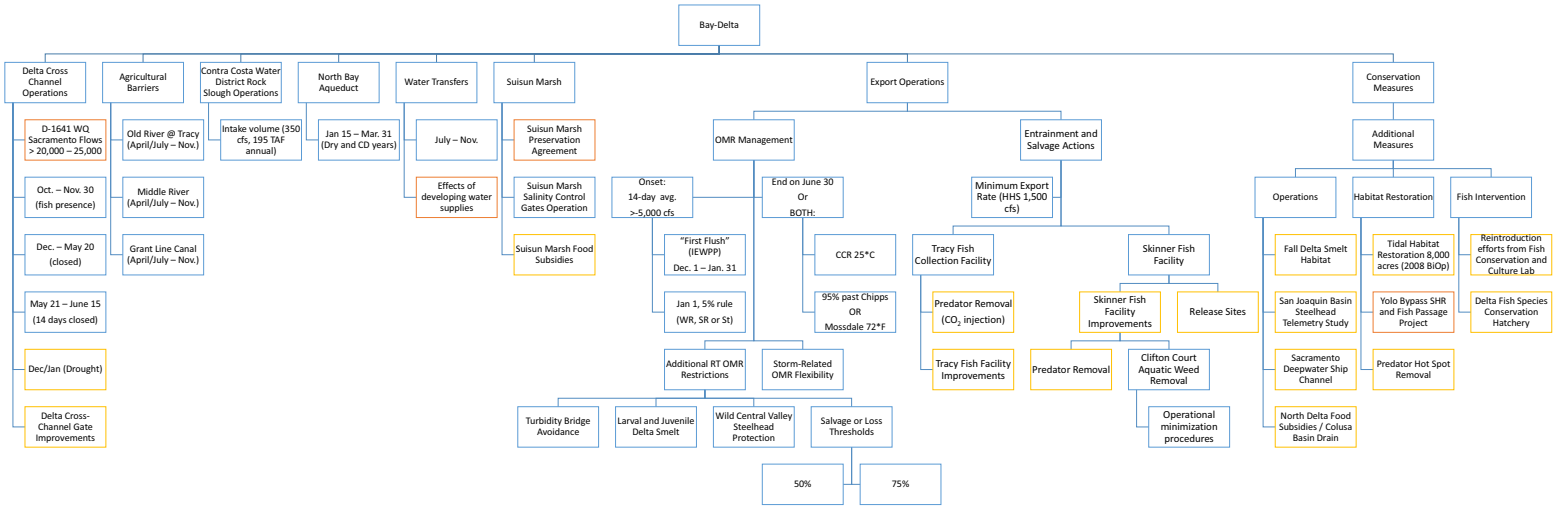
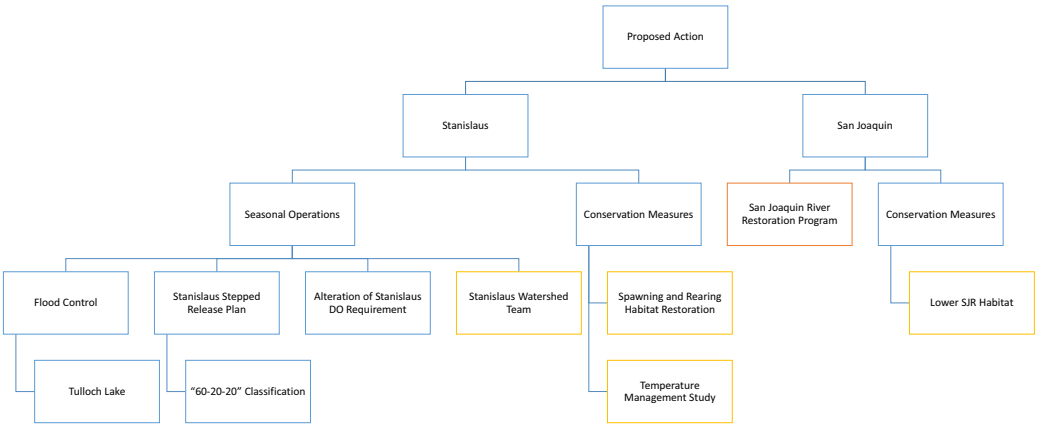

"Core Operations"
Adaptive Management
Not Consulted On Or No Discretion
Proposed Action
CVP/SWP Wide
Divert and store water consistent with obligations under water rights and decisions by the State Water Resources Control Board
Shasta Critical Determinations and Allocations to Water Service and Water Repayment Contractors
2018 Revised Coordinated Operations Agreement
Upper Sacramento
Seasonal Operations
Spring Pulse Flows
Shasta Cold Water Pool Management
Fall and Winter Refill and Redd Maintenance
Operation of a Shasta Dam Raise
Rice Decomposition Smoothing
Spring Management of Spawning Locations
Cold Water Management Tools
Spawning and Rearing Habitat Restoration
Small Screen Program
Winter-Run Conservation Hatchery Production
Adult Rescue
Juvenile Trap and Haul
Trinity
Seasonal Operations
Trinity River Record of Decision
Long-Term Plan to Protect Adult Salmon in the Lower Klamath River
Grass Valley Creek Flows from Buckhorn Dam
Whiskeytown Reservoir Operations
Clear Creek Flows
Spring Creek Debris Dam
Clear Creek Restoration Program
Feather River
FERC Project #2100-134
American River
Seasonal Operations
2017 Flow Management Standard Releases and "Planning Minimum"
Spawning and Rearing Habitat Restoration
Drought Temperature Facility Improvements
Stanislaus
Seasonal Operations
Stanislaus Stepped Release Plan
Alteration of Stanislaus DO Requirement
Spawning and Rearing Habitat Restoration
Temperature Management Study
San Joaquin
San Joaquin River Restoration Program
Lower SJR Habitat
Bay-Delta
Seasonal Operations
Minimum Export Rate
Delta Cross Channel Operations
Agricultural Barriers
Contra Costa Water District Rock Slough Operations
North Bay Aqueduct
Water Transfers
Clifton Court Aquatic Weed Removal
Suisun Marsh Preservation Agreement
OMR Management
Tracy Fish Collection Facility
Skinner Fish Facility
Operations
Suisun Marsh Salinity Control Gates Operation
Fall Delta Smelt Habitat
Clifton Court Predator Management
San Joaquin Basin Steelhead Telemetry Study
Sacramento Deepwater Ship Channel Food Study
North Delta Food Subsidies/Colusa Basin Drain Study
Suisun Marsh Roaring River Distribution System Food Subsidies Studies
Habitat Restoration
Tidal Habitat Restoration (Complete 8,000 acres from 2008 BiOp)
Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project
Predator Hot Spot Removal
Facility Improvements
Delta Cross Channel Gate Improvements
Tracy Fish Facility Improvements
Skinner Fish Facility Improvements
Small Screen Program
Fish Intervention
Reintroduction efforts from Fish Conservation and Culture Lab
Delta Fish Species Conservation Hatchery


Upper Sacramento
Seasonal Operations
Cold Water Management Tools
Spawning and Rearing Habitat Restoration
Operation of a Shasta Dam Raise
Battle Creek Restoration
Lower Intakes near Wilkins Slough
Shasta Temperature Control Device Improvements
Spawning Gravel Injection
40 – 60 acres side channel habitat
Small Screen Program (CV-wide)
Winter Ops.
Spring Ops.
Summer Ops.
Fall Ops.
Flood Control Ops.
Bend Bridge < 100,000 cfs
Winter – Spring Minimum flows (D-1641?)
Fall and Winter Refill and Redd Maintenance
Flood Control Ops.
Balanced Shasta/Folsom (Instream demands & Outflow)
Refill (TCD Ops.)
Spring Pulse Flows
Spring Management of Spawning Locations
Shasta Cold Water Pool Management
Balanced Shasta/Folsom/Trinity (Instream demands, Outflow, and Temp.)
Shasta Cold Water Pool Management
Tier 1
Tier 2
Tier 3
Tier 4
LSNFH Production
Adult Rescue
Juvenile Trap and Haul
Balanced Shasta/Folsom/Trinity (Instream demands, Delta req. Redd dewatering)
Shasta Cold Water Pool Management
Fall and Winter Refill and Redd Maintenance
Rice Decomposition Smoothing


Trinity
Trinity River Record of Decision
Grass Valley Creek Flows from Buckhorn Dam
Whiskeytown Reservoir Operations
Long-Term Plan to Protect Adult Salmon in the Lower Klamath River
Seasonal Operations
Sacramento Temperature Objectives
Trinity Temperature Objectives
End of year Carryover storage
Minimum Flows
Flushing flows
Spring Pulse Flows
Fall Spawning and attraction Flows
Recreation and Power generation
Sacramento water quality objectives
Sacramento Temperature Objectives
Sacramento water quality (Spring Creek Debris Dam)
Temperature management
Summer Temperatures
Fall Temperatures
Clear Creek Flows
Minimum instream flows
10,000 AF Spring pulse flow
Channel maintenance flows (10,000 AF)
Clear Creek Restoration Program
Balanced Sacramento/Trinity/Clear Creek


PA
Feather River
American River
FERC Project #2100-134
Seasonal Operations
2017 Flow Management Standard Releases and "Planning Minimum"
Spawning and Rearing Habitat Restoration
Instream Flows (D-1641)
Local deliveries and exports to Banks pumping
Power Generation
Power Bypass (Drought Declaration)
Minimum flow schedule/index
"Planning Minimum" (TBD 2019?)
Spring Pulse Flow (Mar – April)
Winter Ops.
Spring Ops.
Summer Ops.
Fall Ops.
Flood Control
Limited releases >4,000 cfs
Chinook Redd dewatering (Jan – Feb)
Flood Control
Limited releases >4,000 cfs
Steelhead Redd dewatering (Feb – May)
Spring Pulse Flow (reshaping)
Delta WQ (D-1641)
Temperature Management
Drought Temperature Management
Delta WQ (D-1641)
Temperature Management
Redd Dewatering


Bay-Delta
Delta Cross Channel Operations
D-1641 WQ Sacramento Flows > 20,000 – 25,000
Oct. – Nov. 30 (fish presence)
Dec. – May 20 (closed)
May 21 – June 15 (14 days closed)
Dec/Jan (Drought)
Delta Cross-Channel Gate Improvements
Agricultural Barriers
Old River @ Tracy (April/July – Nov.)
Middle River (April/July – Nov.)
Grant Line Canal (April/July – Nov.)
Contra Costa Water District Rock Slough Operations
Intake volume (350 cfs, 195 TAF annual)
North Bay Aqueduct
Jan 15 – Mar. 31 (Dry and CD years)
Water Transfers
July – Nov.
Effects of developing water supplies
Suisun Marsh
Suisun Marsh Preservation Agreement
Suisun Marsh Salinity Control Gates Operation
Suisun Marsh Food Subsidies
Export Operations
OMR Management
Onset: 14-day avg. >-5,000 cfs
End on June 30 Or BOTH:
"First Flush" (IEWPP) Dec. 1 – Jan. 31
Jan 1, 5% rule (WR, SR or St)
CCR 25*C
95% past Chipps OR Mossdale 72*F
Additional RT OMR Restrictions
Storm-Related OMR Flexibility
Turbidity Bridge Avoidance
Larval and Juvenile Delta Smelt
Wild Central Valley Steelhead Protection
Salvage or Loss Thresholds
50%
75%
Entrainment and Salvage Actions
Minimum Export Rate (HHS 1,500 cfs)
Tracy Fish Collection Facility
Predator Removal (CO_2 injection)
Tracy Fish Facility Improvements
Skinner Fish Facility
Skinner Fish Facility Improvements
Release Sites
Predator Removal
Clifton Court Aquatic Weed Removal
Operational minimization procedures
Conservation Measures
Additional Measures
Operations
Fall Delta Smelt Habitat
San Joaquin Basin Steelhead Telemetry Study
Sacramento Deepwater Ship Channel
North Delta Food Subsidies / Colusa Basin Drain
Habitat Restoration
Tidal Habitat Restoration 8,000 acres (2008 BiOp)
Yolo Bypass SHR and Fish Passage Project
Predator Hot Spot Removal
Fish Intervention
Reintroduction efforts from Fish Conservation and Culture Lab
Delta Fish Species Conservation Hatchery


Proposed Action
Stanislaus
San Joaquin
Seasonal Operations
Conservation Measures
San Joaquin River Restoration Program
Conservation Measures
Flood Control
Stanislaus Stepped Release Plan
Alteration of Stanislaus DO Requirement
Stanislaus Watershed Team
Spawning and Rearing Habitat Restoration
Lower SJR Habitat
Tulloch Lake
"60-20-20" Classification
Temperature Management Study