



# **South Delta Fish Facilities Forum**

***Draft Policy Conclusions and Action  
Items***

**December 10, 2004**



# SDFP Forum Background

- ◆ Funding shortfalls delayed Tracy Fish Test Facility implementation
- ◆ Management questions the original South Delta screening program strategy and cost
- ◆ 2 Years of meetings to educate stakeholders and Agency management on facility and related issues
- ◆ Last met January 2004



# Where we were...

## SDFP Forum Recommendations

- ◆ *Conduct a scientific study on South Delta Hydrodynamics, Fish moments, and water quality*
- ◆ *Conduct Collection, Handling, Transportation, and Release (CHTR) studies*
- ◆ *Continue CVPIA Tracy Fish Facility Improvement Investigations*
- ◆ *Conduct feasibility investigation on “replumbing CCF” to reduce predation*
- ◆ *Postpone investigation of alternative fish facility concepts using combinations of non-Salvage Screens and Flow Recirculation*
- ◆ Determine appropriate level of Fish Facility Technology Development and implementation
  - *What is the immediate or long term need for testing (i.e. Tracy Fish Test Facility or similar)?*
  - *What immediate actions should be taken to reduce known deficiencies?*



# **Review of Draft Policy Recommendations White Paper**



# Summary of Paper

- ◆ Determine appropriate strategy for South Delta fish facilities
  - Maximize fish protection given limited resources
  - Look at alternatives to “Modular” new screen facility approach
  - Develop assurances
- ◆ Adopt strategy in CALFED program Plans
- ◆ Update 10-Year Finance Plan



# Key Recommendations of the Sdff Forum Chairs

- ◆ Phased decision making
- ◆ Science support for long term implementation
- ◆ Assurances for actions
- ◆ Adequate funding needed through Finance plan
- ◆ Immediate actions
- ◆ Long term investments



# Immediate Actions

**SWP Skinner Fish Facility**

**Clifton Court Forebay**

**CVP Tracy Fish Facility**

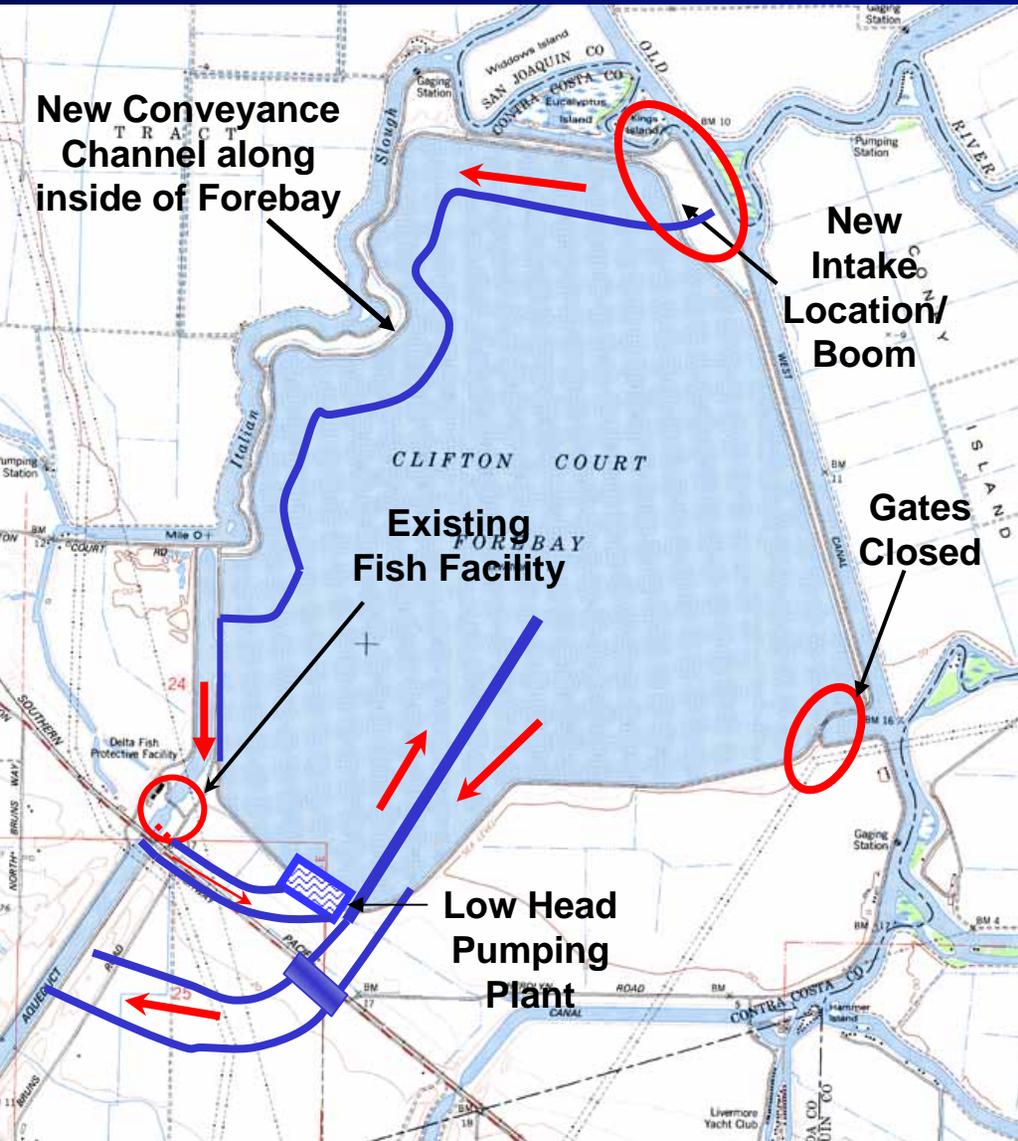


# Immediate Action

- ◆ Feasibility study to investigate technical alternatives that may reduce CCF predation
  - CCF Forebay to Afterbay concept
    - Aka: Replumbing, Short Circuit
  - Impact analysis on South Delta
    - Hydraulics, pumping costs, barriers
  - Predation study to follow viable alternatives
  - Science workshop in Spring 2005
  
- ◆ Actions
  - Study awaiting management direction



# Alternatives Feasibility Study to Reduce Pre-Screen Predation Losses



- ◆ Can the existing fish facility function in this configuration with Low Head Pumping Plant?
- ◆ What are the hydraulic and water level impacts in the South Delta (CVP, SWP, Ag) or on the proposed barriers?
- ◆ Water quality impacts?
- ◆ What are fisheries impacts?
- ◆ Will this these configurations significantly reduce the 75% pre-screen losses
- ◆ What are potential future phases of the work?



# Immediate Action

- ◆ Improve debris removal for fish collection and survival efficiency improvements
  - Reduce fish collection outages
  - Reduce debris into fish hauling trucks
  - Benefits CVP/SWP pumping operations
- ◆ Actions
  - Automated trashracks and debris system improvements in CVP and SWP plans
  - Louver cleaners at CVP required as part of OCAP BO

# **New Automated Trashrake at SWP's Skinner Fish Facility**





# Immediate Action

- ◆ Complete CHTR studies to identify facility or operational improvement actions
  - Focus on delta smelt
  - Review existing facilities by 2006
  
- ◆ Actions
  - CBDA Science reviewed DFG study plans on evaluating existing conditions
    - Studies started in 2004
    - New Building at SWP built
  - DWR release site proposals under development
  - USBR doing related studies under CVPIA
  
- ◆ DFG is lead with IEP Oversight
- ◆ DWR and USBR participating

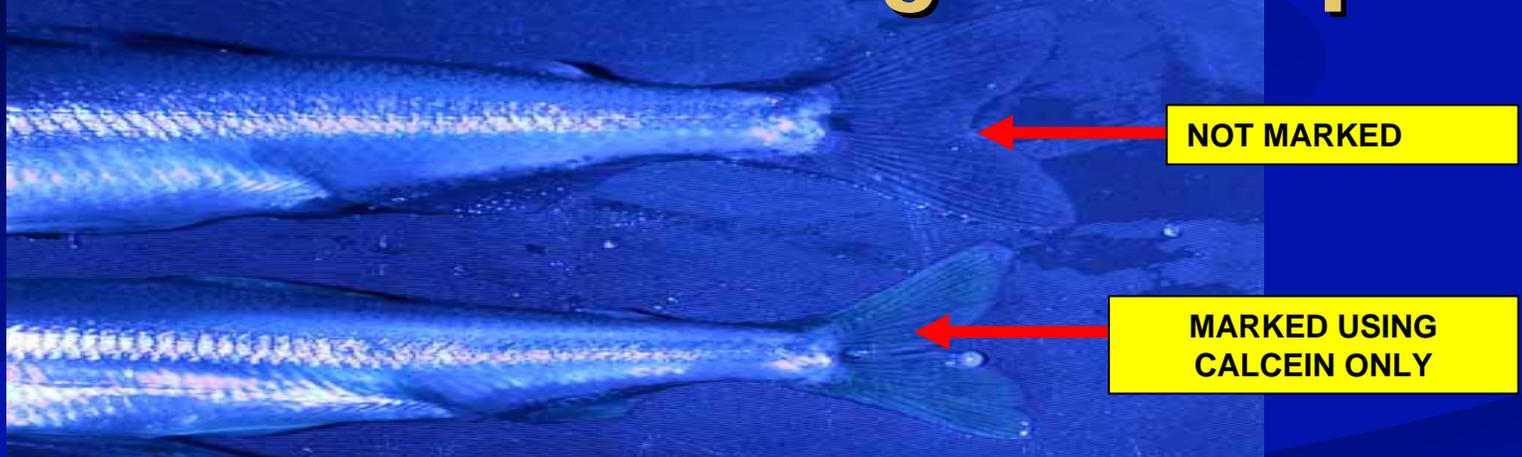


# New CHTR Building Operational in 2004

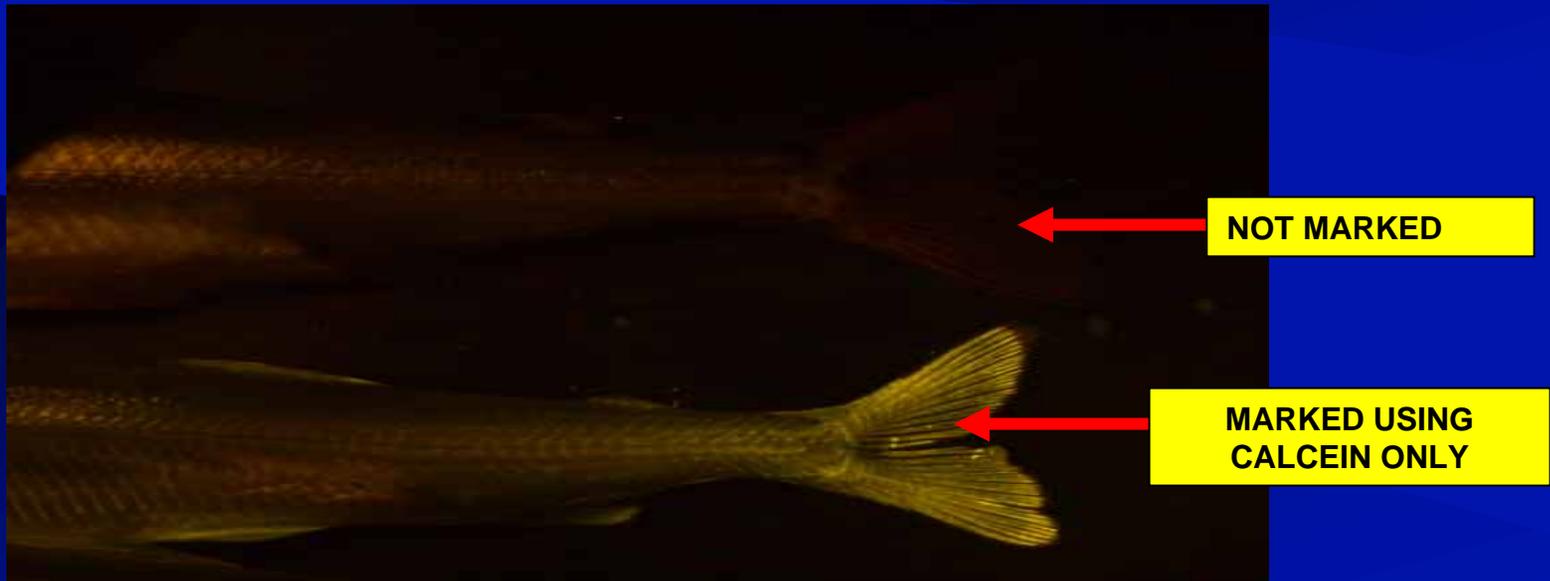




# Delta Smelt Marking Techniques



VIEWING UNDER BLUE LIGHT



VIEWING UNDER FILTERED BLUE LIGHT

# Above Ground Fish Holding Facility Testing



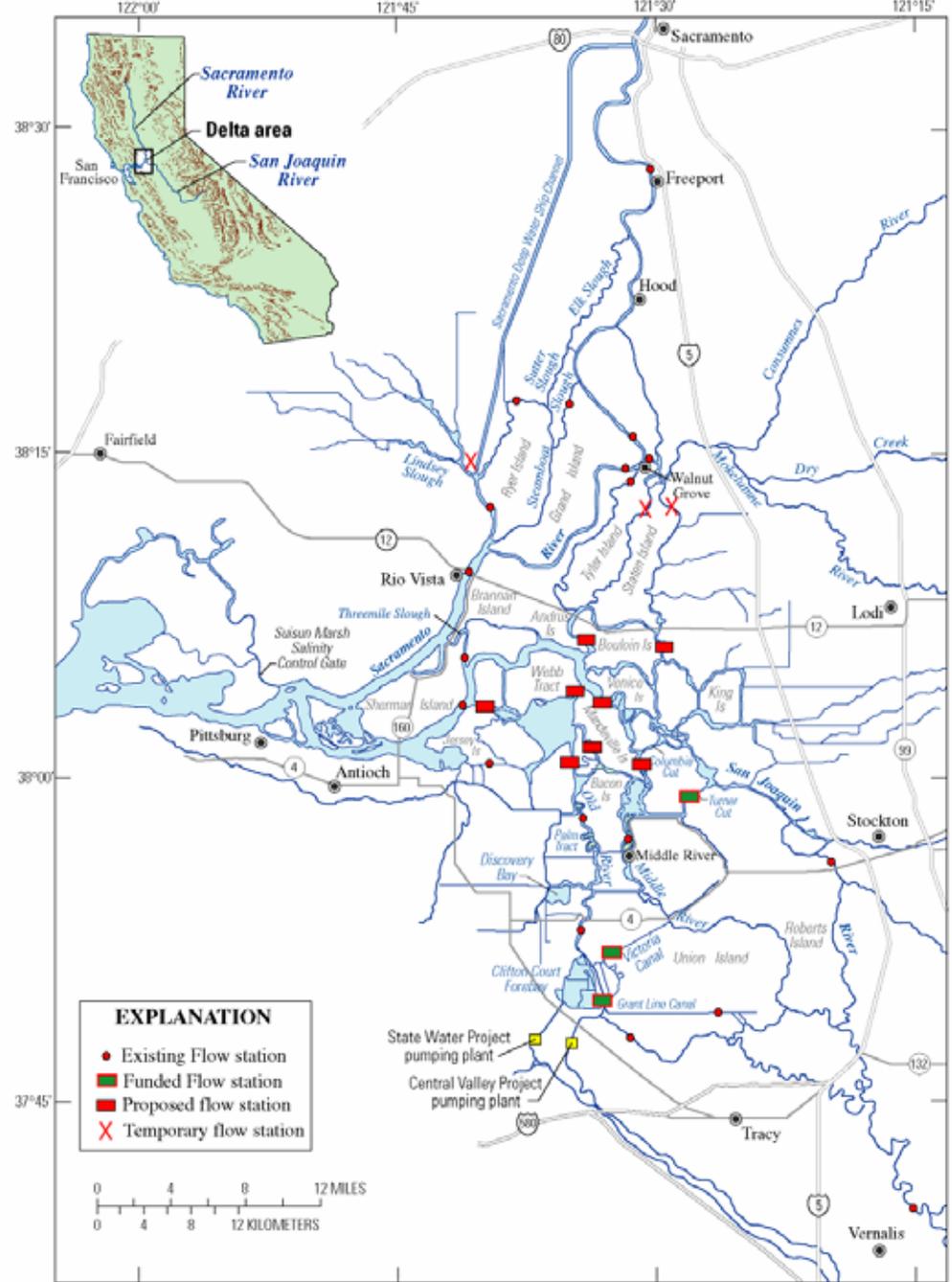


# Immediate Action

- ◆ Conduct South Delta Hydrodynamics/  
Fisheries/Water Quality Studies
  - Identify better operational strategies to minimize fish entrainment
    - Fish, flow, and WQ tradeoffs
  - Identify future CCF reconfiguration operations
  
- ◆ Actions
  - Action included as part of DIP – under Science
  - Pilot studies began in 2004
  - Developing Science proposal for 2006 implementation
  
- ◆ IEP Lead
- ◆ USGS, DFG, DWR, and USBR Participating



# New Flow and WQ Monitoring Stations Being Installed and Models Developed



Existing and proposed flow station locations.

All stations in central and south delta should have temperature/conductivity sensors.

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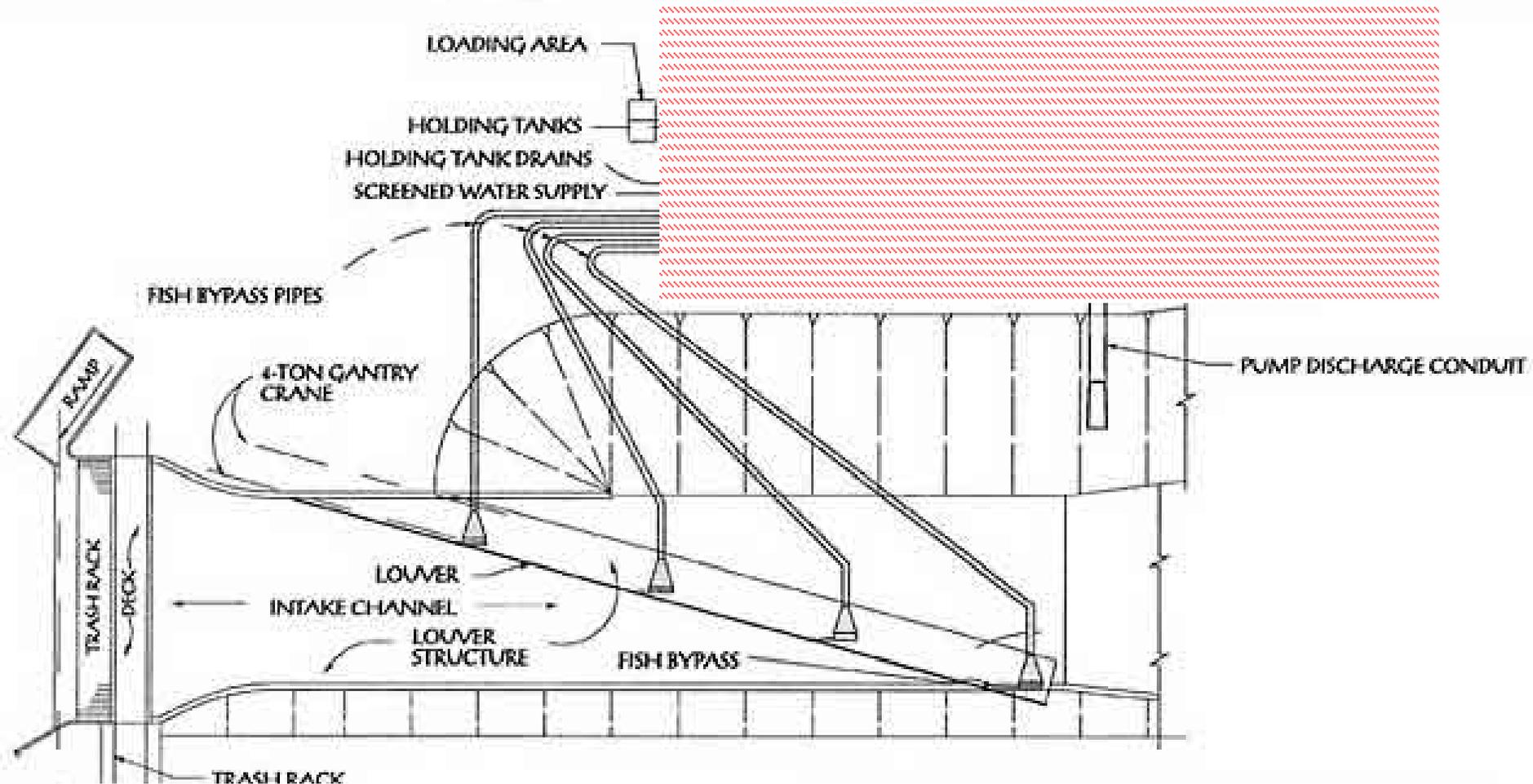


# Immediate Action

- ◆ Phase in “Secondary” and “Holding” facility replacement at Tracy Fish Facility
  - New system will allow better debris and management above ground
  - Can be phased into operations with testing
- ◆ Actions
  - Continuing fish lift and holding tank designs
  - Pilot facility planned in 2005
  - Need Management direction to proceed



# Tracy Fish Facility Improvements



Replace secondary and holding tanks with above ground facility



# Immediate Action

## ◆ Improve Weed Control Measures

- Reduce the debris problems before they come into the facility
- DWR currently harvests or sprays in CCF
- Boating and Waterways supports Delta spraying

## ◆ Actions

- CBDA and Agencies to continue to coordinate with DBW on effectiveness



# Immediate Action

- ◆ Review and Implement Fish Facility Operational Improvements
  - Fish handling improvements
  - Staffing
  - Equipment needs
  
- ◆ Actions
  - Conduct study at CVP and SWP Facilities



# **Long Term Fish Facility Investments**



# Long Term Fish Facility Investments

- ◆ Science-based
- ◆ Facility improvements in context of greatest cost/benefit of fish productivity and habitat value
- ◆ Should not be driven delta smelt – use EWA
- ◆ Modify 10-Yr Finance Plan on agreement
- ◆ Modify Program Plans as needed



# Schedule

- ◆ January 14 – Whitepaper Comments Due
- ◆ January 26 – Revised Whitepaper and Comments Distributed
- ◆ January 31 – SDFP Forum Meeting