

Strategy for Incorporating Volunteer Monitor Data into SWAMP



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State Non-Point Source Program

California Coastal Commission



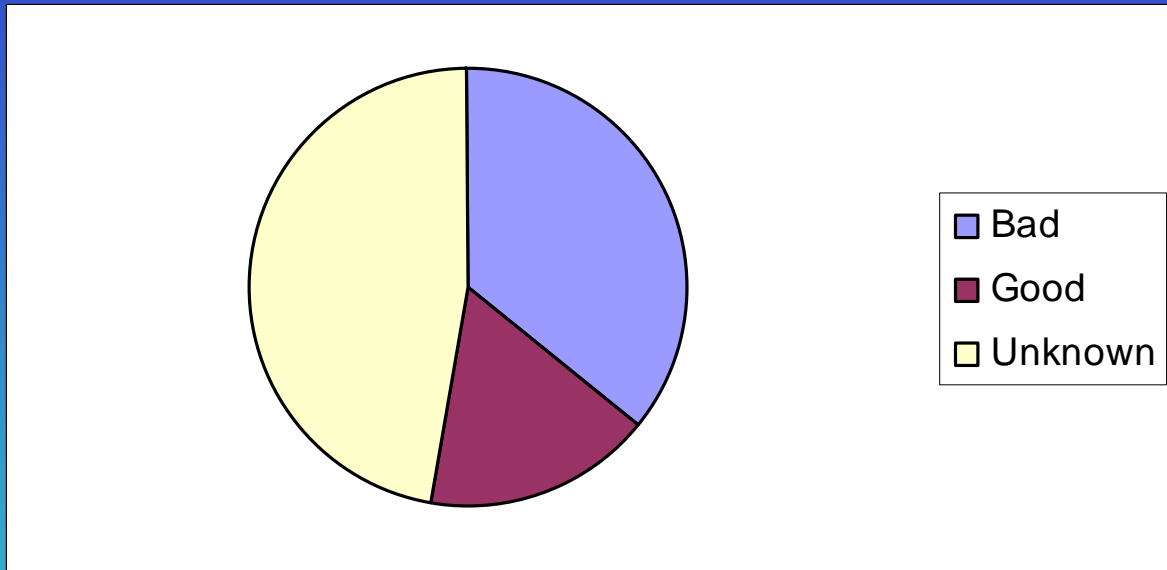
State Non-Point Source Program Monitoring Objectives

- #1: What is the quality of water in California?**
- #2: What is the extent of impairments associated with nonpoint sources?**
- #3: What are the nonpoint sources that are impairing or threatening water quality?**
- #4: Is water quality getting better or worse?**
- #5: Is the California NPS Program investing resources consistent with water quality problems?**
- #6: Are NPS investments effective in protecting and restoring water quality?**

NPS Objectives

These objectives identify the Program's data and information needs, and will be used to design and implement activities that will provide information to better guide implementation of nonpoint source pollution control measures.

Gaps in State Monitoring efforts



State Monitoring Budget

Need \$100 Mil.

Got \$4 Mil.

State Commitment to Citizen Monitoring

Identified in

SWAMP Strategic Plan

Non Point Source Program Plan

319h and Bond Act grant guidelines

State Objectives for Citizen Data

Quality Data

Data Compatibility and Availability

Indicators of Interest

Specific Questions (NPS)

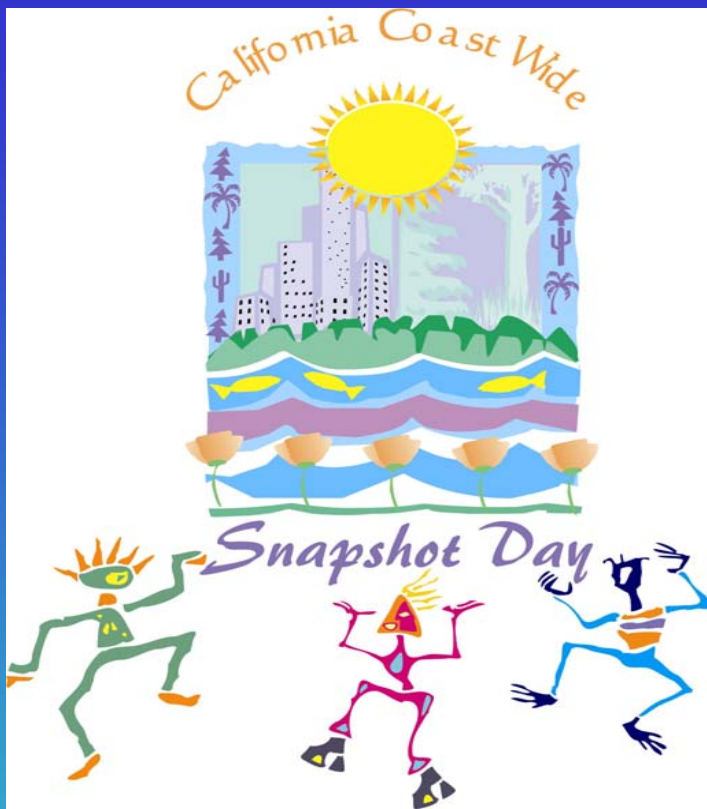
Use Data for State Decision Making

State support efforts

Clean Water Team

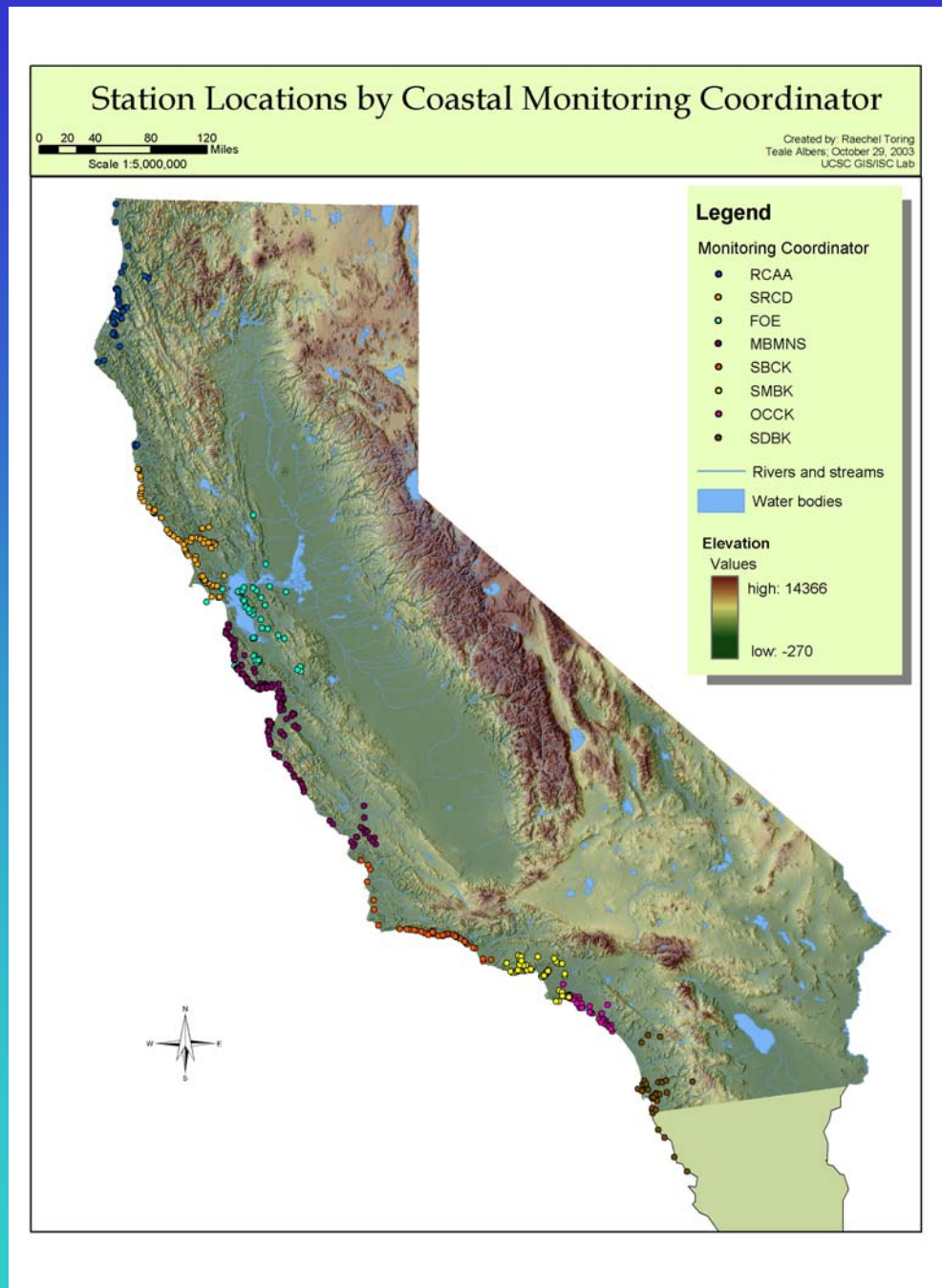
- Trainings - QA and Collection techniques
- Work with individual groups on Monitoring Objectives and Design
- Equipment Support and Loan

**= Improved watershed efforts throughout
California**



Snapshot Day 2003

“California’s First
Coast Wide Citizen
Monitoring Event”



Snapshot Day 2003

Common Question:

“What is the quality of the water flowing to the California coast on May 17th 2003?”

Standard Sample Protocols

Standard QA Requirements

Standard Database

Coast Wide Analysis and Report

Snapshot Day Summary

- 637 people monitored 546 creeks.
- Standard parameters measured at most sites:
 - Dissolved oxygen
 - Air and water temperature
 - pH
 - Conductivity/Salinity
 - Transparency/turbidity
 - Laboratory analysis of nitrate, orthophosphate and bacteria

Snapshot Day Coast Wide Results

- Throughout the coast, 281 stations (51%) exceeded one or more of their water quality objectives.
- Out of the 277 stations that were monitored for every parameter, 33 or 6%, were identified as Areas of Concern.

Missing

A Client –

Uses for Data

Link to Actions-

Listing

Resource Prioritization

Policy

Possible uses of citizen data

Status and Trends

303d listing & delisting

Fill Gaps in State Monitoring efforts

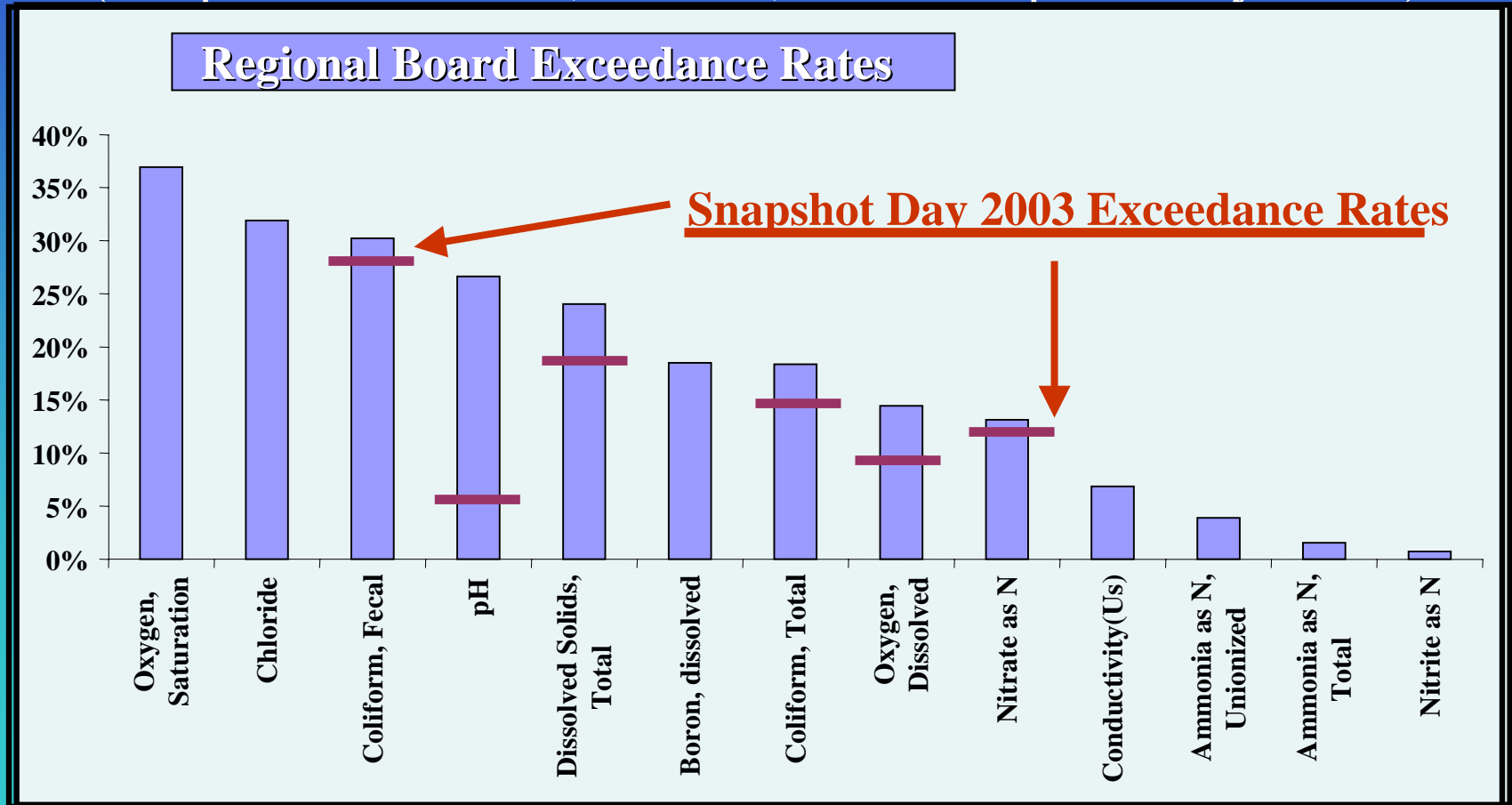
Fill gaps in 305b reporting

Project Effectiveness

Status and Trends

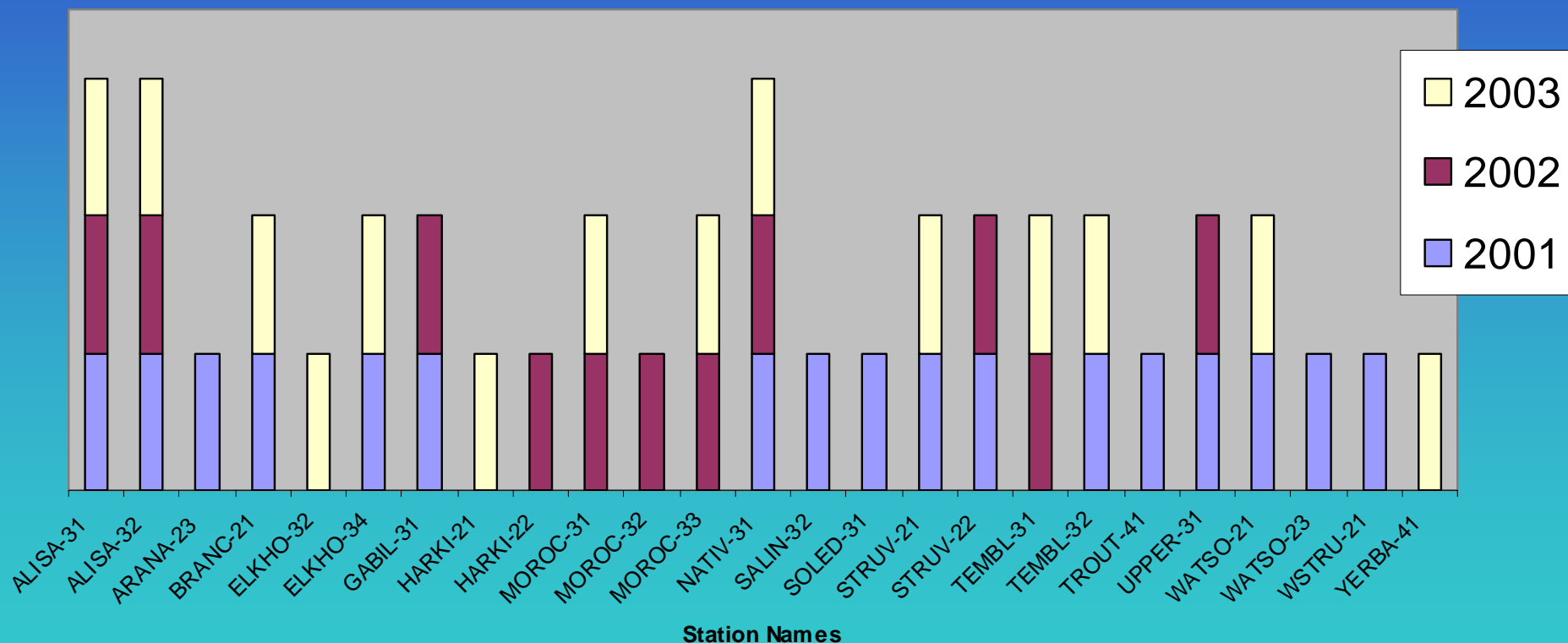
Percent Exceedances by Parameter Regional Board & Snapshot Day

(sample counts RB-2,146 to 4,892 & Snapshot Day ~ 145)



303d listing & delisting

Central Coast Areas of Concern



Fill Gaps in State Monitoring efforts

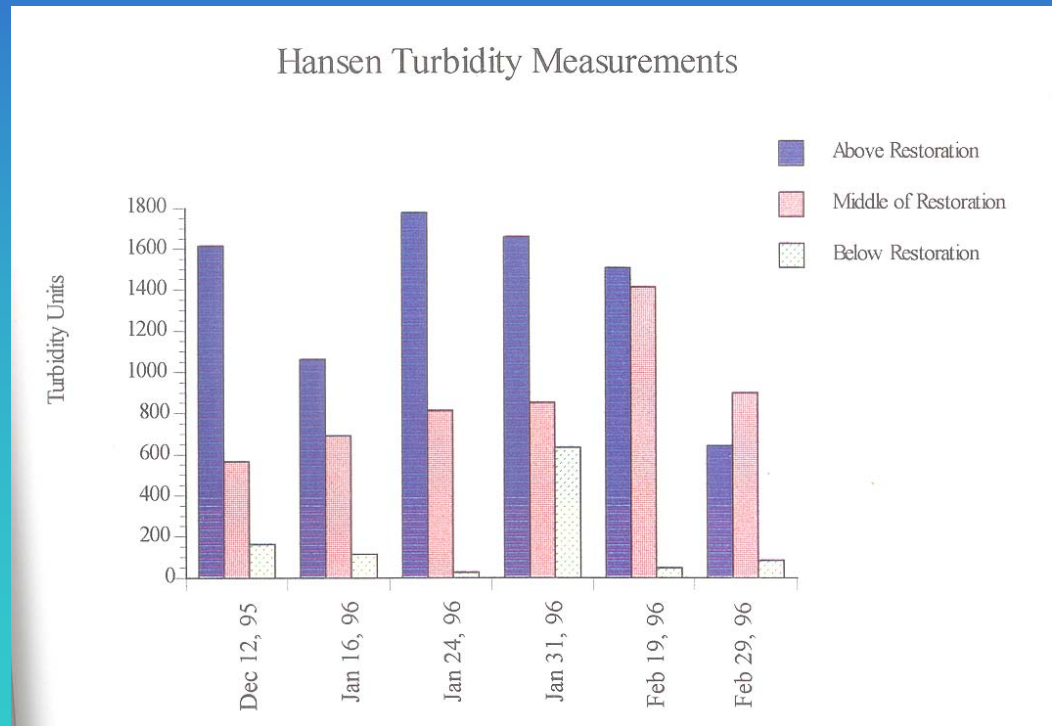
Data gaps are likely in two areas:

- Additional sampling and analysis at existing monitoring locations and
- Additional monitoring locations

SWRCB PLAN FOR IMPLEMENTING
A COMPREHENSIVE PROGRAM 2000

Project Effectiveness

800 State Bond Act Funded Projects,
most of which will include effectiveness
monitoring



2006-2009 NPS

Citizen Monitoring Partnership

- Identify State Clients, Questions, Data Gaps
- Establish Citizen Monitoring Assistance Program to ensure data quality of citizen data
- Establish citizen data tracking and data interpretation strategy
- Support linkage of probabilistic CMAP & project monitoring through use of CRAM
- Use Data in 305b report and 303d Listing

Year 1

- **Host Citizen Monitoring workshops to define State primary questions & opportunities.**
- **Establish a Steering Committee to identify Clients, Monitoring Questions, & Data Gaps**
- **Establish a Citizen Monitoring Assistance Program (QA review process)**
- **Develop a citizen data reporting strategy**
- **Link Probabilistic (CMAP) & Project (CRAM)**

Year 2

- **Expand the Monitoring Assistance Program to groups throughout the state**
- **Support Citizen Monitoring data inclusion in SWAMP database**
- **Provide monitoring equipment for key data parameters to program partners**
- **Test citizen data reporting strategy during the 2007 Snapshot Day**

Year 3

- **Support Citizen Monitoring data inclusion in SWAMP database**
- **Provide equipment for key data parameters to Assistance Program members**
- **Evaluate citizen data and integrate with 305b reporting & NPS program review**

California's Citizen Monitoring Partnership 2006-2009

Clean Water Team

- Trainings - QA and Collection techniques /
- Monitoring Objectives and Design
- Equipment Support and Loan & Purchase

= Improved watershed efforts throughout California

Expand Citizen Component of SWAMP

- ✓ Standard Sample Protocols
- ✓ Standard QA Requirements
- ✓ Standard Data Tracking
- ✓ State Analysis and Report
- ✓ Data of Known Quality

SWAMP Coord. Program

A Client –

NPS Objectives

305b Uses Data

Link to Actions- Listing, Resource Prioritization , Policy

Project Evaluation



