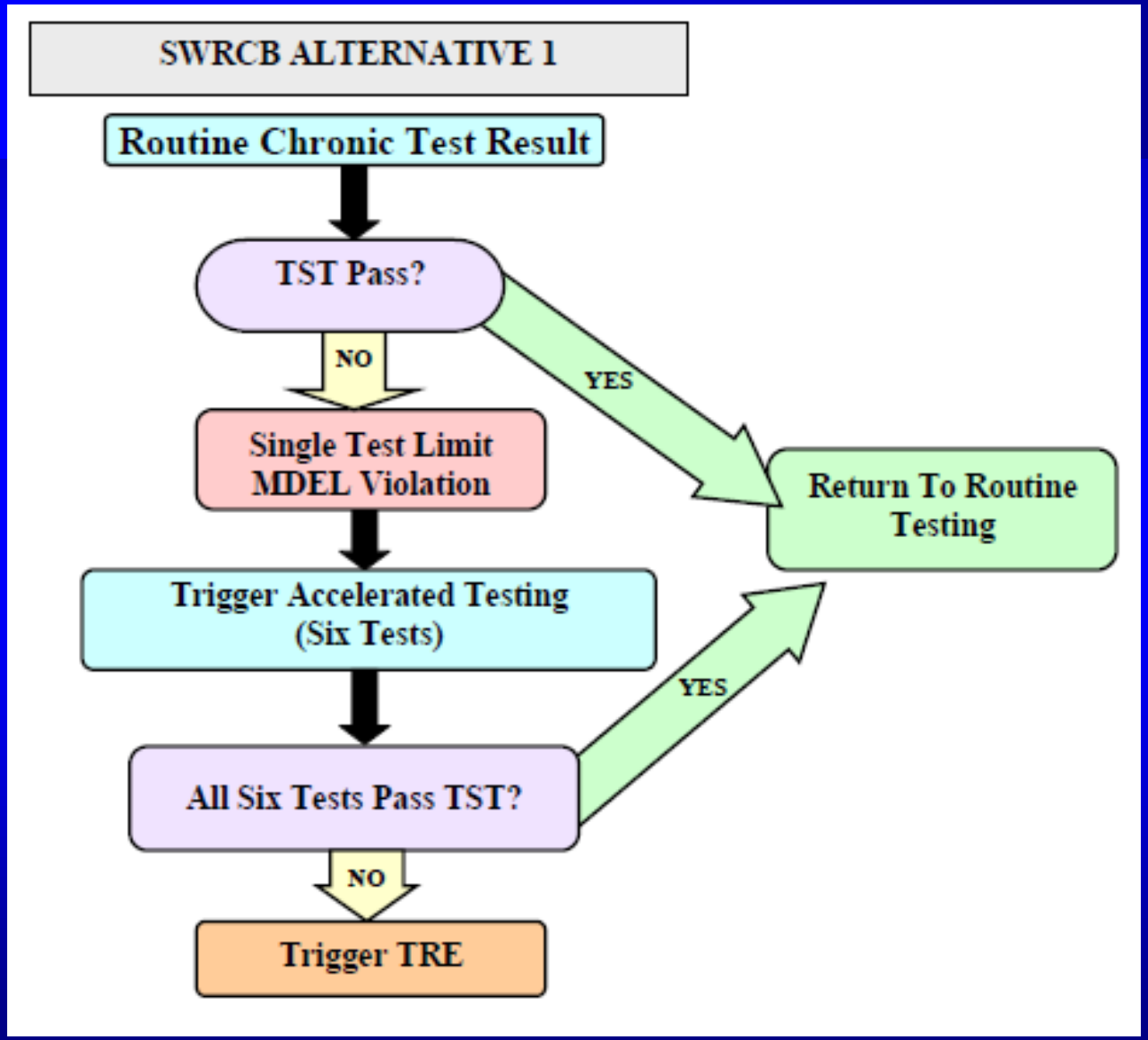
SANITATION DISTRICTS OF LOS ANGELES COUNTY

SWRCB WET Policy Update

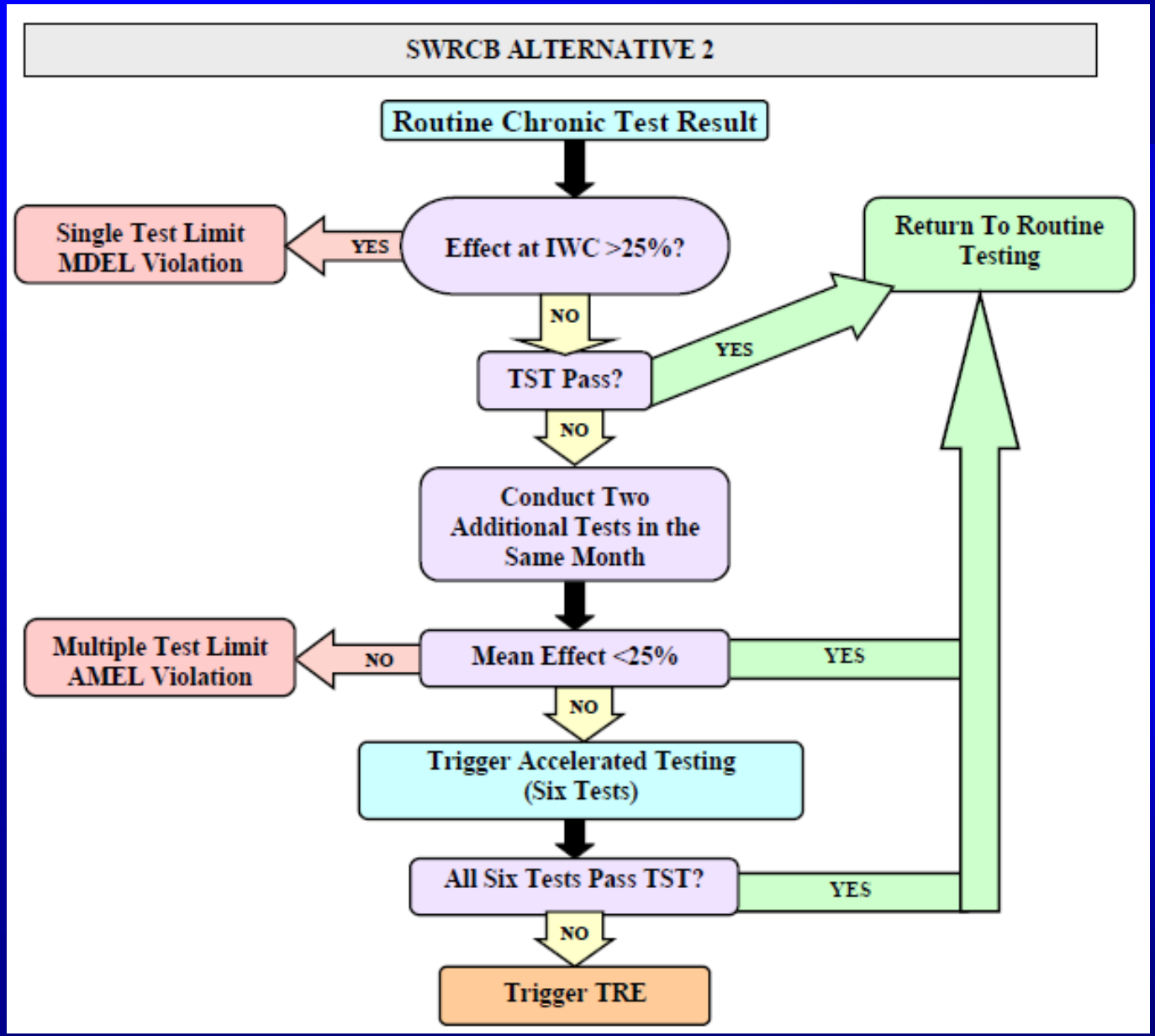
Phil Markle

Sanitation Districts of Los Angeles County

SWRCB Alternatives



SWRCB Alternatives



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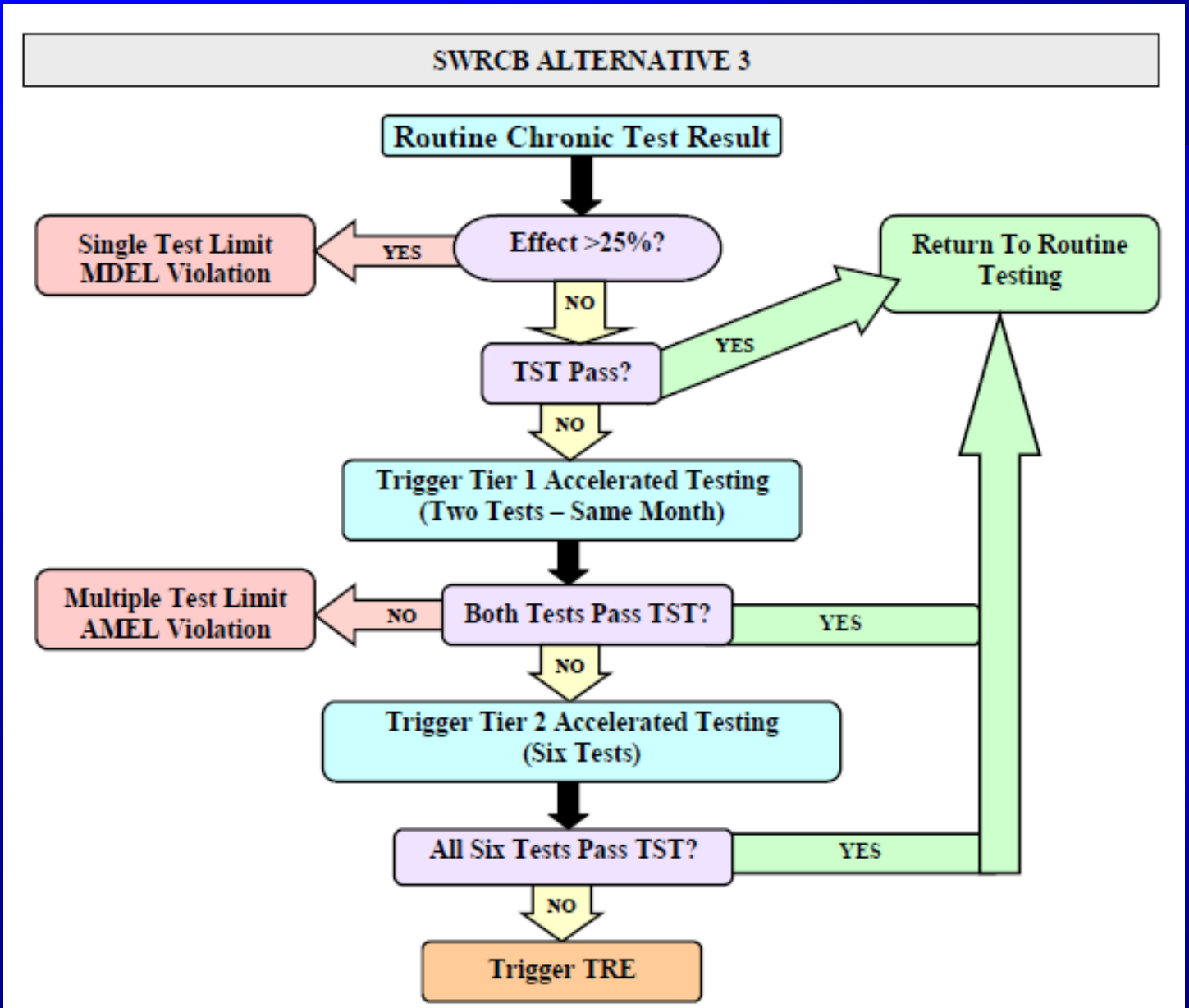
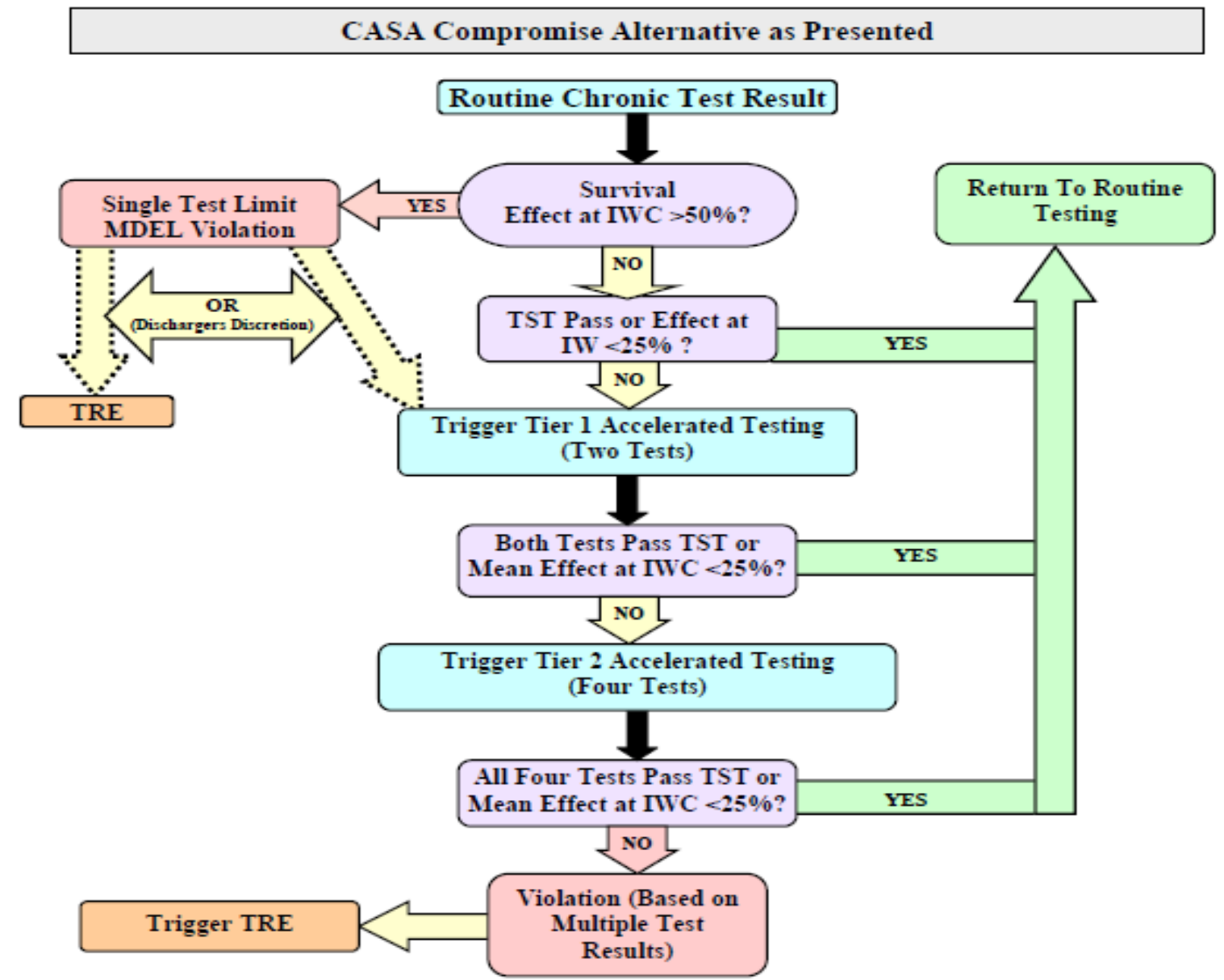
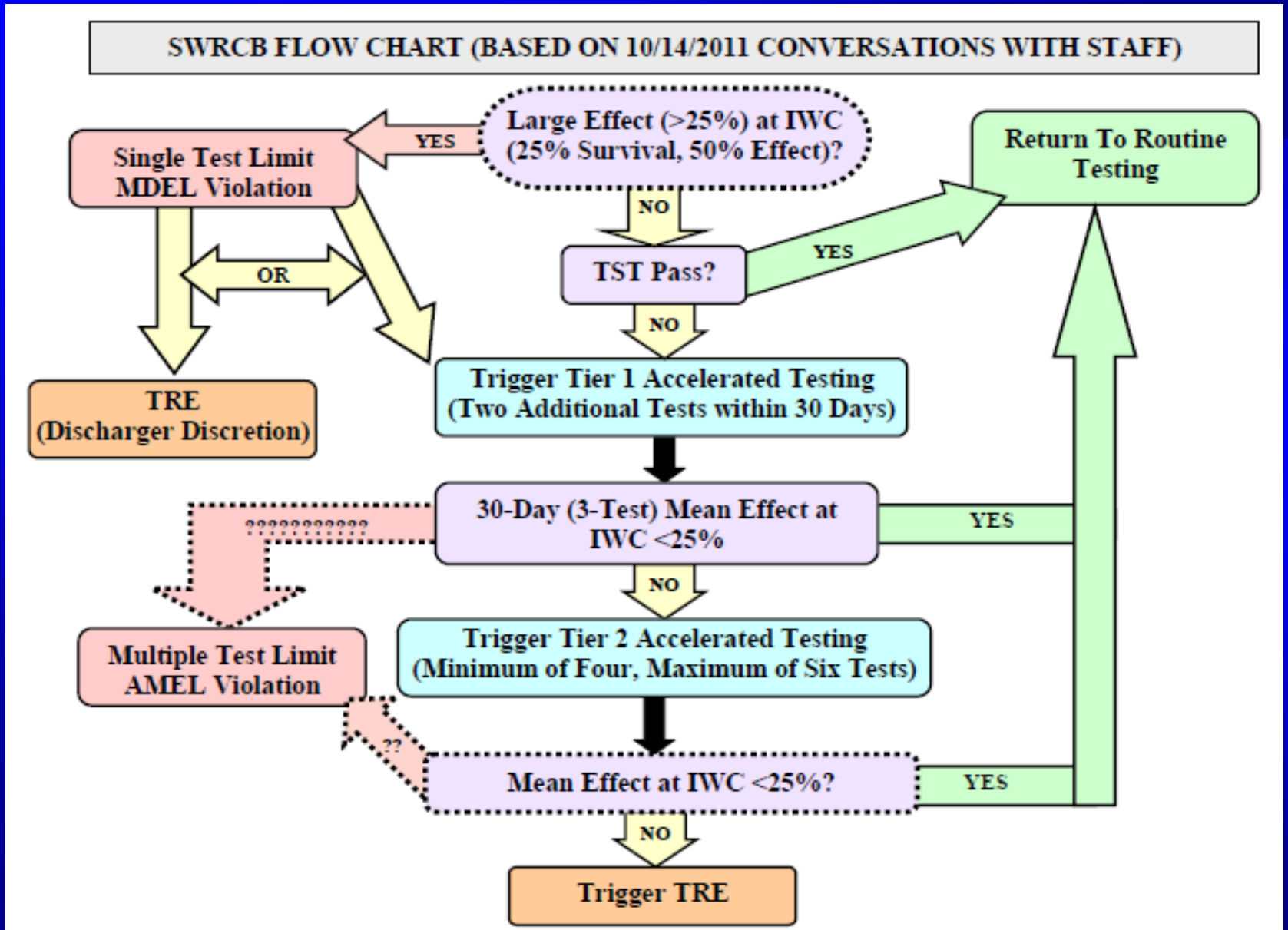


CASA Compromise Alternative



SWRCB Comments on CASA's



SANITATION DISTRICTS OF LOS ANGELES COUNTY

SWRCB Biological Objective Policy Update

Phil Markle

Sanitation Districts of Los Angeles County

SWRCB Goal for the Policy

- Narrative Objectives
  - Develop a new narrative objective
  - Use existing narrative objective
- Establish Implementation Plan
  - Using numeric thresholds
  - Statewide consistency
  - Regional flexibility

Advisory Groups

- Regulatory Advisory Group
  - First meeting held September 2011
  - Consist of RWQCB staff, SWRCB staff, and EPA
- Technical Team
  - Charged with developing the Policy
  - Headed by SCCWRP and Fish and Game
- Scientific Advisory Group
- Stakeholder Advisory Group

Identified Technical Issues

- Reference Criteria Selection
  - Completed.
- Select Metrics to be used
  - IBI/Observed over Expected?
- Addressing Uncertainty
  - Measurement error of +/- 13 IBI units
- Stressor Response Models
  - Expectations for “unregulated” habitat conditions
  - Water body classifications
- Stressor Identification

Reference Selection

- Criteria:

Variable	Scale	Threshold	Unit
% Agricultural	1k and 5k	3	%
	WS	10	%
% Urban	1k and 5k	3	%
	WS	10	%
% Ag + Urban	1k and 5k	5	%
% Code 21	1k and 5k	7	%
	WS	10	%
Road density	1k, 5k, and WS	2	km/km^2
Road crossings	1k	5	$Crossings/km^2$
	5k	10	$Crossings/km^2$
	WS	50	$Crossings/km^2$
Dam distance		1	km
% Canals, pipes		10	%
Instream gravel mines	5k	0.1	Mines/km
Producer mines	5k	1	Mines
Total N		3000	µg/L
Total P		500	µg/L
Conductivity		99/1*	Prediction interval
W1_Hall		1.5	None

Reference Selection

- **Results:**

North Coast	79
Chaparral	117
--Coastal Chaparral	87
--Interior Chaparral	30
South Coast	118
--South Coast Mountains	96
--South Coast Xeric	22
Central Valley	1
Sierra Nevada	273
--Western	131
--Central Lahontan	142
Deserts / Modoc	27

- **Total = 615**

Metric Evaluation

- Multi-Metric Index
  - Index of Biological Integrity (IBI)
- Species list converted into metrics
  - Percent tolerant
  - Percent intolerant
  - Predators
  - Etc.
- Metrics are then combined to a unitless "score"

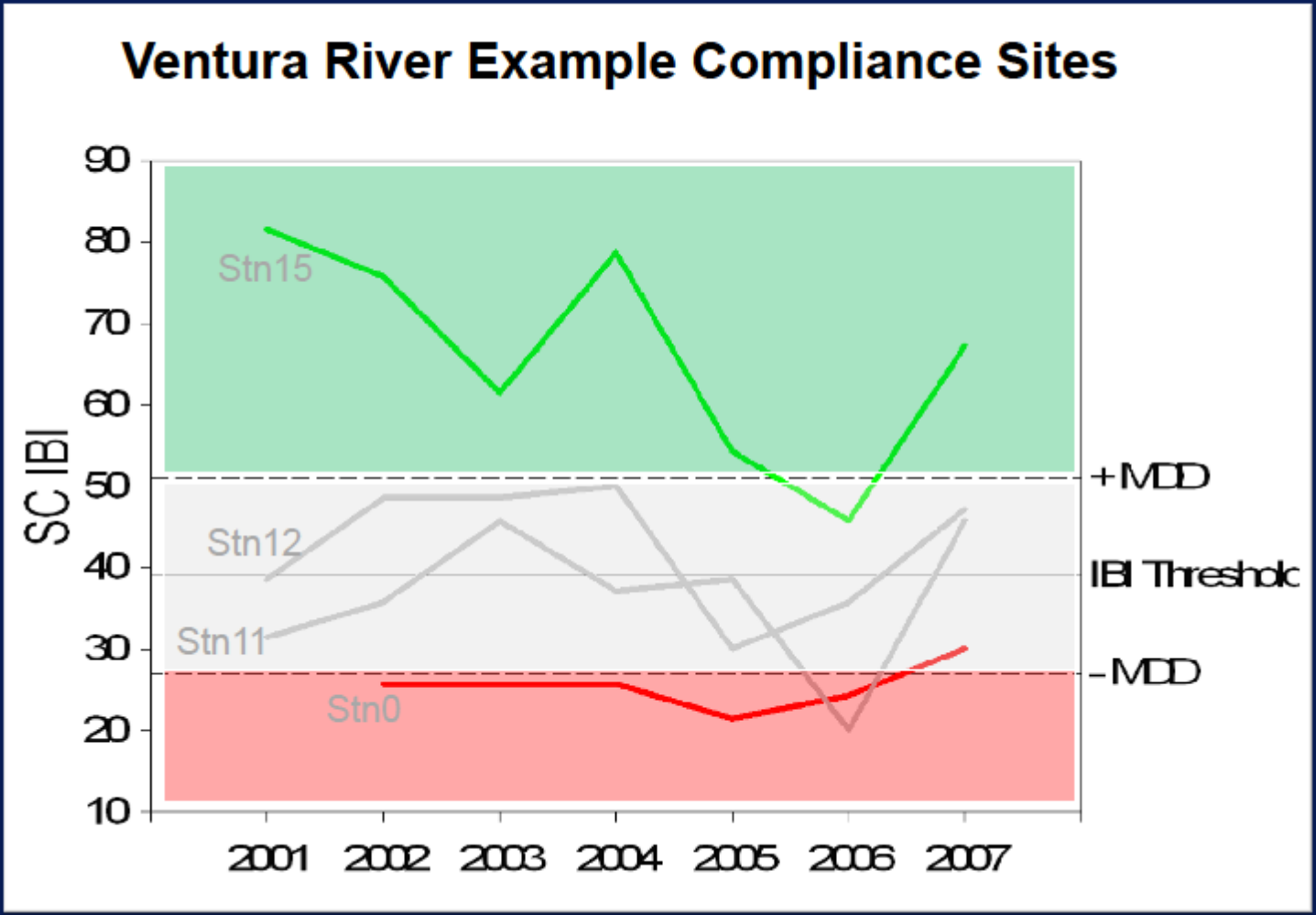
Metric Evaluation

- **Predictive Model**
  - **Observed over Expected (O to E)**
- **Probability of encountering "expected" species compared to what was "observed"**
  - **Example:**

Expected Species	Probability of Observing	Observed Species
Species A	0.6	Species A
Species B	0.2	
Species C	0.4	
Species X	0.2	
Species Y	0.4	
Species Z	0.2	Species Z
Total	2	2

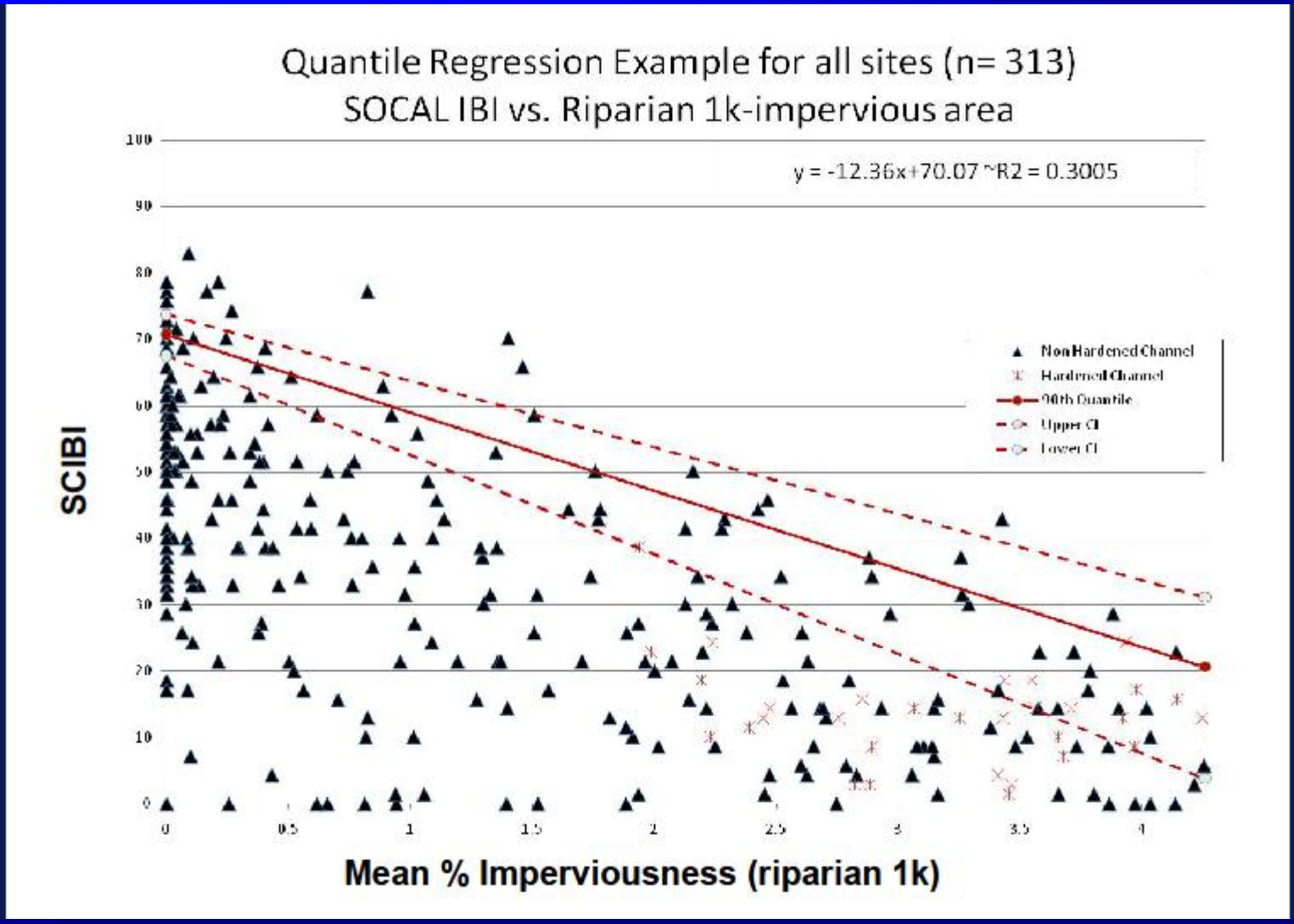
Addressing Uncertainty

- Measurement Error – For IBI +/- 13



Stressor Response Models

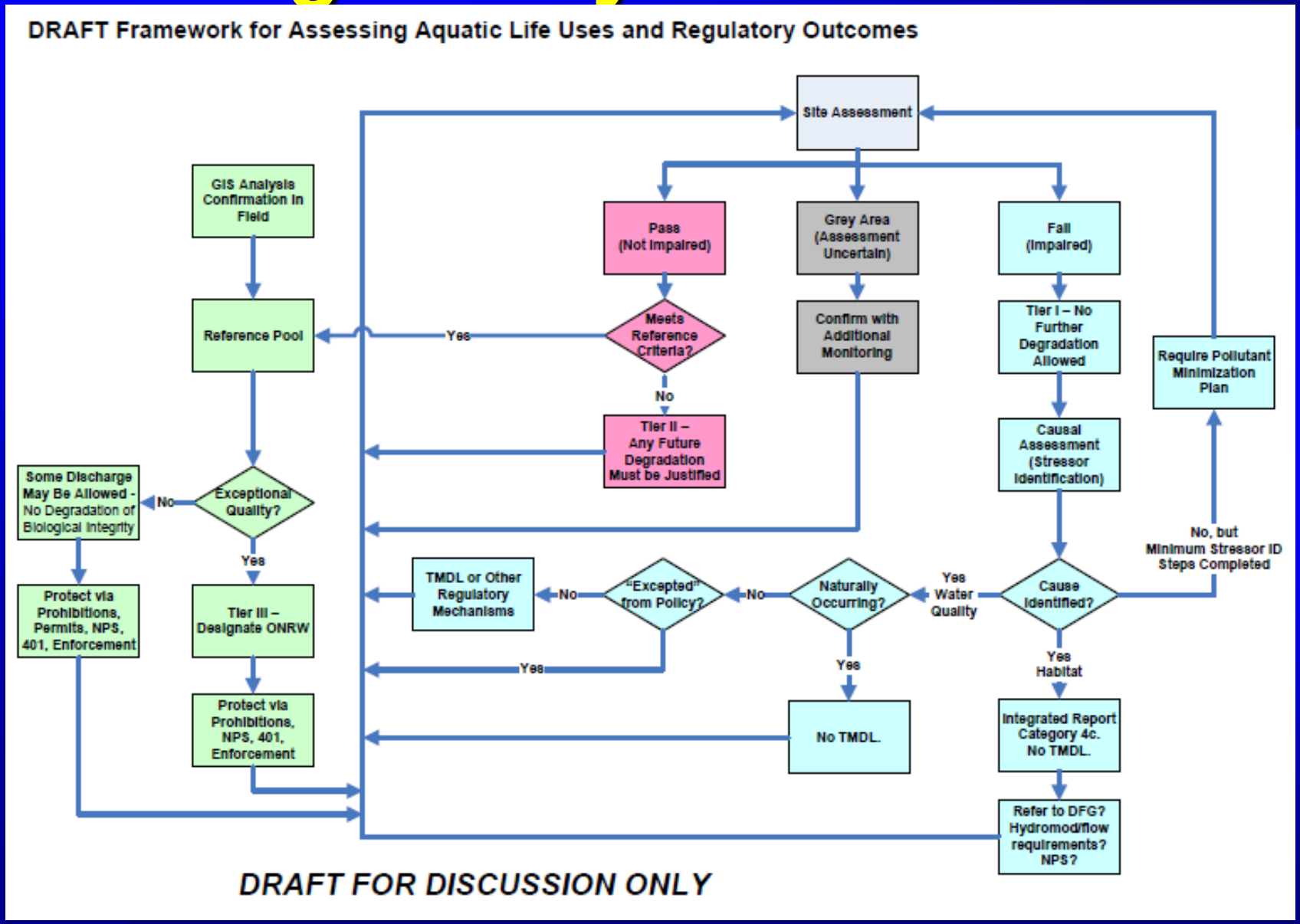
- Best Attainable - Alternative 4



Stressor Identification

- Use EPA's CADDIS
- Three Case Studies
  - North Coast – Timber Harvesting
  - Central Coast – Agriculture
  - South Coast – Urban Development

Regulatory Framework:



Concerns

1. Are local reference locations adequately represented?
2. Biological Integrity – NOT Biological Condition.
3. Best Attainable may be unnecessary and too restrictive.
4. Support Current Regulatory Approach!