Documenting Exposure



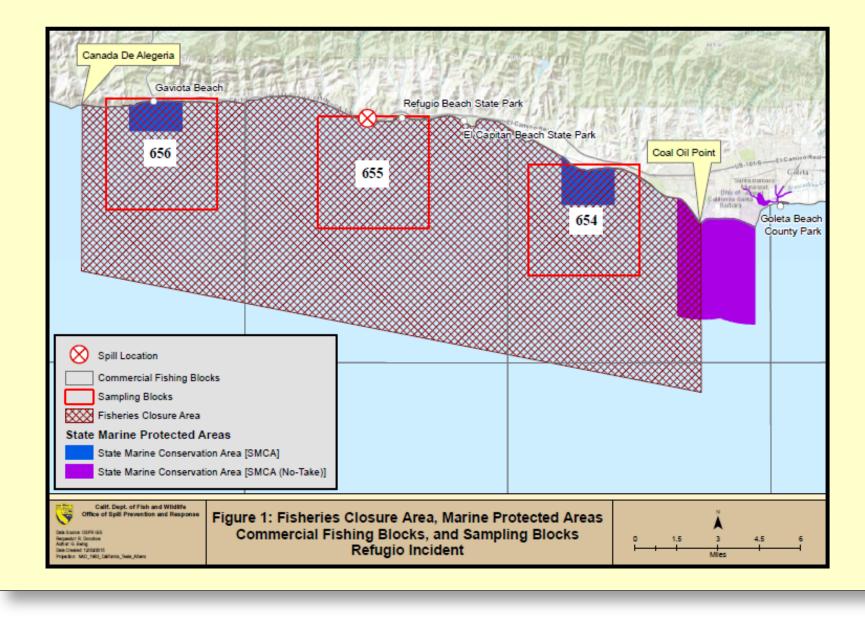




Measure Metabolites in Surfperch Bile



Conduct Grunion Egg Surveys and Analyze Egg and Sand Chemistry



Determine Contaminant Levels in Fish Filets of Representative Species

- Barred Surfperch
- Black & Yellow Rockfish
- Bocaccio Rockfish
- Grass Rockfish
- Kelp Rockfish
- Pacific Mackerel
- Pacific Sanddab
- Vermillion Rockfish



Assessing Injuries to Fish



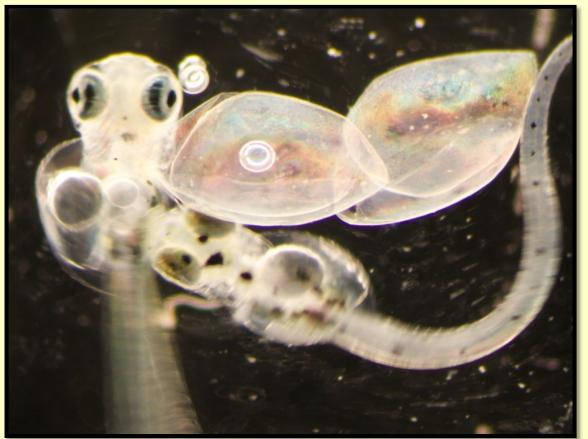
Document Fish Mortalities



Conduct Grunion Spawning Surveys



Survey Grunion Eggs



Assess Grunion Hatching and Larval Survival Rates

Additional Tasks Underway:

- Compare chemistry data to toxicity benchmarks
- Test toxicity of oil on indicator larval fish
- Assess effects of cleanup on grunion
- Estimate magnitude and spatial extent of injury to nearshore fish
- Estimate recovery rates or duration of impacts



Grunion Spawning

Evaluating Potential Restoration Projects

Tasks Underway:

Identify restoration projects that are commensurate with the determined scale of injury

















