



DAMAGE ASSESSMENT, REMEDIATION, and
RESTORATION PROGRAM (DARRP)

Assessment and Restoration Division: Current Methods Development Research



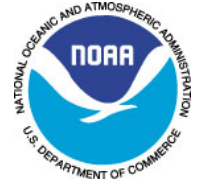
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Assessment and Restoration Division

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Coral Reef Valuation Study



- *Stated Choice methodology being used to estimate the value of coral reefs in Hawaii*
- *Study team: David Chapman, Richard Bishop, Bob Rowe, Bob Leeworthy, Tony Penn, Steve Thur and Norman Meade; Stanley Presser and Richard Carson advisors/peer reviewers*
- *Evaluating total value (i.e. direct plus passive use values) for preserving coral reef ecosystems in NW and Main HI Islands in their current/improved state as well as the damages/primary restoration value for injuries caused by ship groundings on coral reefs*
- *Internet-based panel survey (RTI-Stamford Panel) w/2600 n*
- *In addition to value estimates, testing for potential mode and non-response bias effects*
- *Full survey winter 2008, final report in fall 2008*



California Beach Use Valuation Project

- *Travel cost - random utility site selection model - estimate of the economic value of changes in site quality for users of Southern California beaches*
- *Study team: Michael Hanemann, Linwood Pendleton, David Layton, James Hilger, Craig Mohn, David Chapman, Bob Leeworthy and Norman Meade; Edward Morey, Catherine Kling, Nora Schaeffer, Roger Tourangeau and Eric English advisors/peer reviewers*
- *Evaluating closures and water quality changes at over 50 major beaches in southern CA (Orange and Los Angeles counties)*
- *Telephone-based panel survey of approx. 900 n beach users/wave in six two-month waves over a 12 month period in 2000 (diary survey) – obtained detailed information on over 6.7K beach trips (single and multi-day)*
- *In addition to estimates of changes in economic value, estimates of annual beach use (total and participation rates), types of beach activities, and the economic impacts (pecuniary) for changes in beach use in Orange and LA counties were obtained*
- *Various study reports available on:
<http://marineeconomics.noaa.gov/SCBeach/laobeach1.html>*
- *Additional reports and papers in preparation*



Restoration Scaling for Marine Resources: A compendium

- *A review/synthesis of existing economic and ecological methods for selecting and scaling restoration projects in response to injuries to marine resources*
- *Project team: Charles H. Peterson and Eric English*
- *Description of current ecological and economic methods used in scaling; summarize previous scaling applications in the literature and review evidence of success (or lack thereof); review literature on the value of particular restoration outcomes and identify opportunities for future research*
- *Focus will primarily be on restoration scaling for oil and hazardous waste releases and vessel groundings, but broader restoration scaling literature, for example on mitigation programs to compensate for commercial development, will also be evaluated*
- *Comprehensive report to be issued in late 2008*



Estuarine Habitat Productivity Ratios Project

- *Survey/synthesis of available data for U.S. Atlantic and Gulf coasts to evaluate productivity tradeoff ratios between key coastal marine habitat types*
- *Study team: Charles Peterson, Melisa Wong, Michael Piehler, Jonathan Grabowski, Robert Twilley, Mark Fonseca and a number of peer reviewers/advisors*
- *Metric is food web support, i.e. net primary production of foods suitable for consumption across three lowest trophic levels: 1)herbivores/detritivores; 2)benthic macroinvertebrates.; and 3)nektonic fish and crustaceans*
- *Habitat types being compared: salt marsh, oyster reefs, sea grass beds, mangrove forests, and intertidal & subtidal sand flats*
- *Ratios can vary by salinity, water temps, trophic levels, size/connectivity/patchiness of habitat, 3-dimensional structure, etc.*
- *Applicable for Habitat Equivalency Analysis (HEA) and restoration planning*
- *Results to be published summer/fall 2007*



Monitoring Recovery of an Oiled Salt Marsh

- *Purpose is to evaluate recovery over time of an oiled salt marsh located in the Chesapeake Bay beginning with year 8 of the recovery (ie. Post spill)*
- *Evaluate hydrocarbon loadings at various sediment depths, food web support (productivity) and health of benthic organisms*
- *Multi-year study in proposal stage*