### **PUBLICATIONS**

The Project distributes news of its progress and findings through several types of documents. The papers (contributions) listed below have been published or accepted for publication in scientific journals or proceedings volumes during the past year. We have also produced 14 technical memoranda since July 1973: These informal documents contain data or preliminary results that may be of immediate interest to other marine researchers. Much of the material in the technical memoranda will be published in final form in papers or technical reports in the future.

The Project issues quarterly progress reports that contain information about our current projects, changes in staff, and new facilities and equipment. Three of these newsletters. Progress Reports 11, 12, and 13, have been issued since July 1973. Progress Report 13 is a pamphlet containing general information on organization and staff and a summary of our findings to date (copies are available through the Project office).

### **CONTRIBUTIONS**

Mearns, A.J. 1974. Southern California inshore demersal fishes: Diversity, distribution, and disease as responses to environmental quality. CalCOFI Reports, vol. 17. Contribution 7.

Young, D.R., J.N. Johnson, A. Soutar, and J.D. Isaacs. 1973. Mercury concentrations in dated varved marine sediments collected off southern California. Nature, 224: 273-5. Contribution 8.

Mearns, A.J., ateid M.J. Sherwood. 1974. Environmental aspects of fin erosion and tumors in southern California Dover sole. Tvans. Amer. Fish. Soo. Contribution 9.

Chen, K.Y., C.S. Young, T.K. Jan, and N. Rohatgi. Suspended and dissolved trace metals in W/W effluent. Presented at the 46th Water Pollut. Control Fed. Conf., 5 October 1973, Cleveland, Ohio. To be published in the J. Water Pollut. Control Fed. Contribution 11.

de Goeij, J.J.M., V.P. Guinn, D.R. Young, and A.J. Mearns. Activation analysis trace element studies of Dover sole

liver and marine sediments. Presented at the IAEA/FAO/WHO Symposium on Nuclear Techniques in Comparative Studies of Food and Environmental Contamination, 27-31 August 1973, Otaniemi, Finland. To be published in the proceedings volume. Contribution 13.

Mearns, A.J. 1973. Coastal fish and fisheries. Proceedings of the Conference of Government Representatives on Discharges to the Pacific Ocean from Municipal Wastewater Treatment Facilities, 12-13 July 1973, San Francisco. Assoc. of Metro. Sewerage Agencies, Seattle, Wash. Contribution 14.

Hom, W., R.W. Risebrough, A. Soutar, and D.R. Young. Deposition of DDE and PCB in dated sediments of the Santa Barbara Basin. Accepted for publication in Science. Contribution 16.

Sherwood, M.J., and A.J. Mearns. Disease responses in southern California coastal fishes. Presented at the Naval Undersea Center Conference on Marine Biology in Environmental Protection, 13-15 November 1973, San Clemente Island, Calif. To be published in the proceedings volume. Contribution 17.

Young, D.R., and T.C. Heeson. Inputs and distributions of chlorinated hydrocarbons in three southern California harbors. Presented at the Fourth Technical Conference on Estuaries of the Pacific Northwest, Corvallis, Oregon. To be published in the proceedings volume. Contribution 18.

Bascom, W. 1974. Waste disposal in the ocean. Sc-i. Amer. (August 1974). Contribution 19.

Young, D.R. 1973. Trace contaminants in the Southern California Bight. Proceedings of the Conference of Government Representatives on Discharges to the Pacific Ocean from Municipal Wastewater Treatment Facilities, 12-13 July 1973, San Francisco. Assoc. of Metro. Sewerage Agencies, Seattle, Wash. Contribution 20.

### TECHNICAL MEMORANDA

Mearns, A.J., and P.L. Haaker. 1973. Identifying and coding color anomalies in flatfishes. TM 200.

Mearns, A.J., M.J. Alien, and M.J. Sherwood. 1973. An otter trawl survey of the central Orange County coast. TM 201.

Klontz, G.W., and R.A. Bendele. 1973. Histopathological analysis of fin erosion in southern California marine fishes. TM 203.

Mearns, A.J., M.J. Alien, and M.J. Sherwood. 1973. An otter trawl survey off the Palos Verdes Peninsula and Santa Catalina Island, May-June 1972. TM 204.

Mearns, A.J., M.J. Alien, M.J. Sherwood, and R. Gammon. 1973. An otter trawl survey off the Palos Verdes Peninsula and Santa Catalina Island, November-December 1972. TM 205.

Mearns, A.J., and M.J. Alien. 1973. Checklist of inshore demersal fishes from southern and central California. TM 206.

Southern California Coastal Water Research Project. 1973. Baited camera observations of demersal fish. TM 207.

Hendricks, T.J., and D.R. Young. 1974. Modeling the fates of metals in ocean-discharged wastewaters. TM 208.

Mearns, A.J., M.J. Alien, and M.J. Sherwood. 1974. An otter trawl survey of Santa Monica Bay, May-June 1972. TM 209.

Hendricks, T.J., and J.M. Harding. 1974. The dispersion and possible biological uptake of ammonia in a wastefield, Point Loma, May 1972. TM 210.

Word, J. and D. Charwat. 1974. Key to shrimp common in southern California trawl catches. TM 211. Young, D.R., T.C. Heesen, D.J. McDermott, and P.E. Smokier. 1974. Marine inputs of polychlorinated biphenyls and copper from vessel antifouling paints. TM 212.

Mearns, A.J., a\|d H.H. Stubbs. 1974. Comparison of otter trawls used in southern California coastal surveys. TM 213.

Young, D.R., and T.C. Heesen. 1974. Inputs and distributions of chlorinated hydrocarbons in three southern California harbors. TM 214.

## SAMPLING AT SEA

## CRUISES CONDUCTED BY THE COASTAL WATER RESEARCH PROJECT

Quarterly trawl survey off Dana Point, FURY II, 8 August 1973.

Collection of microbiological samples in Santa Monica Bay, MARINE SURVEYOR, 19 September 1973.

Comparative trawl survey of Santa Monica Bay, Palos Verdes shelf, and San Pedro Bay, R/V VANTUNA, 24-26 September 1973.

Quarterly trawl survey off Dana Point, FURY II, 15 November 1973.

Collection of microbiological samples in Santa Monica Bay, MARINE SURVEYOR, 15 November 1973.

Water quality measurements in Santa Monica Bay, R/V VANTUNA, 14-15 January 1974.

Collection of microbiological samples in Santa Monica Bay, MARINE SURVEYOR, 31 January 1974.

Quarterly trawl survey off the 1-mile outfall in Santa Monica Bay, MARINE SURVEYOR, 1 February 1974.

Quarterly trawl survey off Dana Point, FURY II, 14 February 1974.

Collection of microbiological samples in Santa Monica Bay, MARINE SURVEYOR, 28 February 1974.

Underwater television taping off Palos Verdes and Catalina Island, HOLIDAY CLIPPER, 6 March 1974.

Collection of live fish and microbiology samples off Palos Verdes, R/V NAUTILUS, 26 March 1974.

Underwater television taping off Palos Verdes, HOLIDAY CLIPPER, 5 April 1974.

Day/night trawl survey in Santa Monica Bay, MARINE SURVEYOR, 16-17 April 1974.

Installation of five sediment collectors off Palos Verdes, SEA-S-DEE, 18 April 1974.

Water quality and current measurements off the 7-mile outfall in Santa Monica Bay, MARINE SURVEYOR, 24 April 1974.

Underwater television taping off Palos Verdes, HOLIDAY CLIPPER, 29 April 1974.

Retrieval of samples from sediment collectors off Palos Verdes, SEA-S-DEE, 8 May 1974.

Collection of microbiology samples in Santa Monica Bay, MARINE SURVEYOR, 9 May 1974.

Quarterly trawl survey off Dana Point, FURY II, 15 May 1974.

Underwater television taping of the 7-mile outfall in Santa Monica Bay, MARINE SURVEYOR, 16 May 1974.

Collection of microbiological samples in Santa Monica Bay, MARINE SURVEYOR, 21 May 1974.

Trawl survey in Santa Monica Bay, MARINE SURVEYOR, 22-23 May 1974.

Retrieval of samples from sediment collectors off Palos Verdes, SEA-S-DEE, 23 May 1974.

Underwater television taping off Orange County outfall, ENCHANTER 4, 28 May 1974.

Installation of sediment collectors in Santa Monica Bay, MARINE SURVEYOR, 5 June 1974.

Water quality measurements in Santa Monica Bay, R/V VANTUNA, 6-7 June 1974.

Retrieval of sediment samples and relocation of sediment collectors in Santa Monica Bay, MARINE SURVEYOR, 19 June 1974.

Installation of test buoys for "caged animal" DDT uptake experiment off Palos Verdes, 18-ft runabout, 17 June 1974.

Attachment of mussels to test buoys for DDT uptake experiment, 18-ft runabout, 24 June 1974.

# MONITORING CRUISES IN WHICH PROJECT PERSONNEL PARTICIPATED

Quarterly trawl survey off Palos Verdes, Los Angeles County Sanitation Districts, SEA-S-DEE, 5 July 1973.

Quarterly trawl survey off Orange County, Orange County Sanitation Districts, R/V VANTUNA, 5 September 1973.

Quarterly trawl survey off Orange County, Orange County Sanitation Districts, R/V VANTUNA, 11 November 1973.

Quarterly trawl survey off Palos Verdes, Los Angeles County Sanitation Districts, SEA-S-DEE, 5-7, 11 December 1973.

Quarterly trawl survey off Catalina Island, Los Angeles County Sanitation Districts, SEA-S-DEE, 13 December 1973.

Rockfish Trawl survey off Catalina Island, Occidental College, R/V VANTUNA, 19 April 1974.

Quarterly trawl survey off Orange County, Orange County Sanitation Districts, R/V VANTUNA, 8 May 1974.

Quarterly trawl survey off Palos Verdes, Los Angeles County Sanitation Districts, SEA-S-DEE, 17 May, 31 May, 11 June, and 18-19 June 1974.

Quarterly trawl survey off Oxnard, County of Ventura, PORTUNUS, 18-19 June 1974.