

SALTON SEA SCIENCE PANEL

- ❖ DR RICK GERSBERG, SDSU
- ❖ DR GEOFF SCHLADOW, UC DAVIS
- ❖ DR CHRIS AMRHEIN, UC RIVERSIDE
- ❖ DR THERESA PRESSER, USGS
- ❖ DR NILS WARNOCK, PRBO
- ❖ MR JACK CRAYON, DFG
- ❖ DR HARRY OHLENDORF, CH2MHILL
- ❖ DR DOUG BARNUM, USGS, PANEL CHAIR

- ❖ PANEL FACILITATORS
 - ❖ DAVID CHRISTOPHEL, CH2MHILL
 - ❖ JERRY BOLES, CDWR
 - ❖ Ali Gasdick, CH2MHILL

SALTON SEA SCIENCE PANEL

- ◆ PANEL CAN INVITE TOPICAL EXPERTS AS NEEDED
- ◆ PANEL HAS HELD 3 MEETINGS TO DATE, INCLUDING 7/14
- ◆ MISSING MEMBER OF THE PANEL FOR AIR QUALITY
- ◆ PANEL SERVES AS INTERNAL ADVISORY GROUP TO CH2MHILL

SALTON SEA SCIENCE PANEL

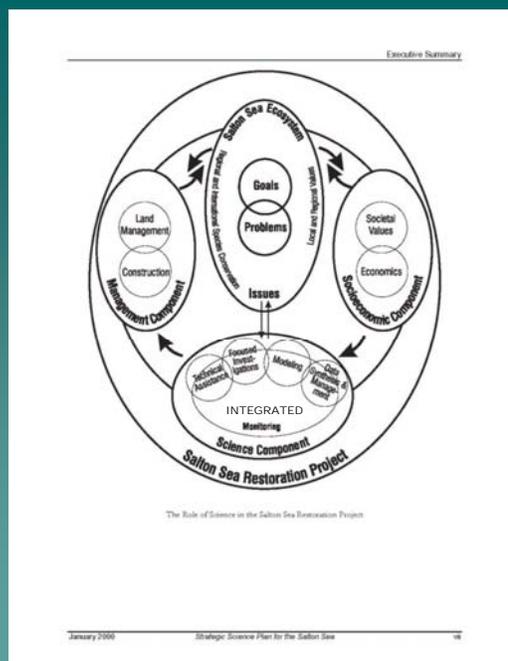
- ◆ TASKS OF THIS PANEL INCLUDE SCIENCE REVIEW AND COMMENT FOR RANGE OF ALTERNATIVES
- ◆ PROVIDE THE SCIENCE BEHIND THE ALTERNATIVES THE ENGINEERS ARE DEVELOPING.
- ◆ PROVIDE SCIENCE GUIDANCE FOR FUTURE SALTON SEA PROGRAM ACTIVITIES

SALTON SEA SCIENCE PANEL

- ◆ DISCUSSIONS SO FAR HAVE EXAMINED SALTON SEA INFLOWS, NUTRIENT AND CONTAMINANT DYNAMICS IN VARIOUS SEA CONFIGURATIONS
- ◆ WORKING ON A SELENIUM MASS BALANCE
- ◆ FISH AND WILDLIFE POPULATIONS AND THEIR HABITATS

SALTON SEA SCIENCE PANEL

- ◆ PANEL HAS LONGSTANDING SUPPORT FOR INTEGRATED MONITORING PROGRAM. USGS SCIENCE OFFICE HAS DEVELOPED AND CIRCULATED SUCH A PLAN FOR THE PAST 4 YEARS, BUT IT REQUIRES FUNDING.
- ◆ INTEGRATED MONITORING PROGRAM HAS TO BE LONG-TERM, SCIENCE-BASED, MUST HAVE ENOUGH COVERAGE TO BE MEANINGFUL, MUST INCLUDE SEDIMENTS, WATER QUALITY, INVERTEBRATES, FISH, MIGRATORY BIRDS.
- ◆ EPA FUNDED STUDIES ESTABLISHED SOME BASELINE DATA BUT THERE HAS BEEN LITTLE SINCE
- ◆ EPA STUDIES EXPOSED SOME RESEARCH QUESTIONS WE HAVE SINCE FUNDED AND COMPLETED STUDIES.



INTEGRATED MONITORING PLAN WHY?

- ◆ IT IS AT THE CORE OF AN ADAPTIVE MANAGEMENT PROGRAM – WE NEED TO UNDERSTAND HOW A SYSTEM FUNCTIONS TO EXPLAIN CHANGES
- ◆ THE SALTON SEA IS NOT A STABLE SYSTEM, STUDIES DONE 5 YEARS AGO DO NOT NECESSARILY APPLY NOW
- ◆ IT IS GOOD BUSINESS PRACTICE THAT ALL BUSINESSES UTILIZE – THEY MONITOR HOW THE BUSINESS IS FUNCTIONING
- ◆ WITH RESTORATION THERE WILL COME A DIFFERENT WATER QUALITY, DIFFERENT FLOW SCHEMES, DIFFERENT CONTAMINANT REGIMES, CHANGE OF INFRASTRUCTURE
- ◆ THERE IS A MYTH OF TOO MUCH SCIENCE – MONITORING IS SIMILAR TO TAKING THE PULSE OF A PATIENT

INTEGRATED MONITORING PLAN

- ◆ USES MULTIPLE COMMONLY AGREED SAMPLING POINTS AND PROTOCOLS
- ◆ USES SINGLE DATABASE AS A REPOSITORY –ACCESS TO ALL
- ◆ HAS COMPONENTS FOR SEDIMENTS, WATER, INVERTEBRATES, FISH AND BIRDS
- ◆ COST IS SMALL COMPARED TO OTHER PROGRAM ACTIVITIES, YET BENEFIT IS GREAT
- ◆ COST OF NOT IMPLEMENTING A PROGRAM IS FAILURE OF ADAPTIVE MANAGEMENT
- ◆ DOES NOT REPLACE OTHER SCIENCE AND RESEARCH
- ◆ GIVES US TOOLS TO ASK BETTER AND MORE FOCUSED QUESTIONS
- ◆ BOTTOM LINE- IT IS A PERFORMANCE EVALUATION

INTEGRATED MONITORING PLAN

- ◆ BASED ON COSTS ASSOCIATED WITH OTHER SIMILAR MONITORING PLANS AND 1999-2000 STUDIES
- ◆ \$2 MILLION PER YEAR FOR THE NEXT 5 YEARS
- ◆ ADDITIONAL FUNDING BEYOND 5 YEARS
- ◆ SCIENCE PANEL UNANIMOUS AGREEMENT 7/14/05 – STRONGLY RECOMMENDS AND CONSIDERS THIS URGENT

