SENIOR REVIEW AND FUNDING RECOMMENDATION
Salton Sea Financial Assistance Program – FY 2012-2013

- ✓ **Applicant:** Ned Daugherty, Principal
- ✓ **Project Title**: Salton Sea Farms Project
- ✓ **County:**
- ✓ **Grant Request: $1,000,000**
- ✓ **Total Project Cost: not entirely clear**

Project Description: The applicants propose a novel project to build an Integrated Seawater Agriculture System (ISAS) on the shores of the Salton Sea. An initial farm would be constructed with a closed water system where water from the Salton Sea would flow through a series of ponds and wetlands: first to aquaculture ponds (shrimp would be grown there), then to Macro Algae growing ponds to ponds growing bivalves, and then fish ponds. After this series of ponds, this water is transferred through a mangrove plantation to fields of *Salicornia* with the water eventually ending up in settling ponds to produce salt. Accompanying these ponds and wetlands would be the construction of the ISAS Discovery Center (IDC) that will function as an outreach, research and development, education and training center that would highlight the components of ISAS. An existing integrated seawater farm system like this proposed project, located in the country of Eritrea, is offered as proof the proposed project is a viable one. The timeline for the initial IDC project going from construction to operation and harvest and then analysis and reporting is estimated to be about two years.

Summary

Criteria	Score	Factor	Total
1. Consistency with Program goals and objectives	3	7	21
2. Applicant qualifications	3	3	9
3. Project Readiness	0	3	0
4. Feasibility	0	7	0
		Total Score	**30**

Consistency with Program goals and objectives:

This proposal only partially addressed the Program goals, and was not well documented. It was noted that the project might create limited habitat (initial project covers about 6 ha) suitable for wildlife, however specific benefits were not quantified and there was no mention of targeted wildlife (or fish). The proposal focused on the economic revival of the Salton Sea region, not on the ecological values of the sea. Furthermore, while the applicants submitted a video of a proof of concept project in Africa, no peer reviewed support of protocols was referenced and no Operation and Maintenance Plan was submitted.

Applicant qualifications:

It is clear that at least one of the applicants (Daugherty) has experience with similar projects, but Daugherty only submitted a list of similar projects (an impressive list) he has worked on through the years. It is not clear what his actual role was on each project and no other information (education, other experience, etc.) was

presented. The other applicant's (White) resume does not indicate that he has any experience implementing the type of project that is proposed. There is no resume attached for a third listed partner, The Seawater Foundation. Overall, the proposal lacks information on how their project team will work together and who would do what.

Project Readiness:

Overall, the reviewers thought that the time frames given to do this project were vague and unrealistic. In fact, the ISAS Launch Project Schedule (7.2) given in the applicant's report appears to be taken from a different proposal since the start date of the project is listed as August 2011. The applicants gave little indication that they were familiar with the California State and US federal permit requirements for a project like this, and the reviewers thought that it was highly unlikely that the permit process would be completed within 12 months after the assumed agreement execution date.

Feasibility:

Overall, it is unlikely that the applicants could bring their Salton Sea Farms Project concept to reality in a reasonable time frame. Part of this reasoning stemmed from the proposal's lack of information on some of the basic issues impacting the Salton Sea ecosystem. There was no mention of selenium and its potential negative impacts on the proposed sea farm, and this is one of the biggest issues challenging wetland restoration projects at the Salton Sea. There was no mention of the issue of receding sea levels at the Salton Sea, or discussion of how their proposed wetland complex might be impacted by this. Threatened and Endangered species issues were not referenced; listed pupfish have a significant effect on the design and permitting of other restoration projects at the sea. Mangroves are considered invasive plants in parts of California (e.g. San Diego) and there was no discussion about the feasibility (and legality) of introducing mangroves into the Salton Sea ecosystem. Overall, no scientific or technical information was submitted in support of the proposal.

Another significant issue was that the budget was poorly explained and it looked like it was lifted from a different proposal for a different project. Various questions came up like, under the IDC Lab Summary CAPEX budget, why does the cost of furnishing the facilities cost 9x more than the facility? Under the IDC Lab Summary budget what is an expatriate manager and why is the cost for that person so high (especially the indirect expenses)? Yet the budget reflected no cost for pumping water, a likely large expense for a project like this. Money for maintenance and dredging of channels was another cost that was lacking.

FUNDING RECOMMENDATION: $0

Per the Financial Assistance Program PSP 2012, if a "0" score is received for any of the four evaluation criteria, the applicant, and therefore the proposal, will be disqualified. This proposal received two "0" scores in the Consensus Review.