

## UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668 September 26, 2008

Diane Clayton, PhD Global Climate Change Education Project Manager Office of Education NASA Headquarters 300 E St. SW Washington, DC 20546

Dear Dr. Clayton:

This is a letter of support for Mr. Gary Freitag's proposal for the 2008 National Aeronautics and Space Administration's (NASA) Research Announcement: Global Climate Change Education. Mr. Freitag's proposal is entitled "Using Baseline Oceanographic and Biological Data Collection to Improve K-12 Teacher Competency for Global Climate Change Education to Provide an Opportunity for Teachers to Actively Engage in Global Climate Change Science Research."

The National Marine Fisheries Service, Alaska Region, (NMFS-AKR) wholeheartedly supports funding of this project. NMFS-AKR has collaborated with Mr. Freitag for over a decade on a wide range of marine resource activities in southeast Alaska ranging from the marine mammal entanglement and stranding networks to the more recent Smithsonian Environmental Research Center's (SERC) tunicate monitoring project, the latter of which is a major component of this proposal. Mr. Freitag brings an excellence to everything he is involved with and can be counted on to provide the enthusiastic leadership and competence that will bring success to any project.

This proposal enhances both the NASA Giovanni and SERC tunicate monitoring projects by finding a useful connection between them and then bringing that connection into the classroom where the combined project will be a tool to educate, inspire and inform students. Results would be relevant to an issue that is in the forefront of climate change impacts – the spread of invasive species. This issue is of great interest to Alaska, where a productive and relatively pristine marine environment that supports both subsistence and commercial economies is at risk from the negative impacts of invasions from non-native organisms, in this case tunicates. This project will contribute towards understanding that risk now, while tunicate infestations are still thought to be small and limited within Alaska and so could provide invaluable information for resource managers while at the same time engaging students in a real world problem solving effort. This linkage between students and resource managers is another useful connection that would come from this project.

In summary, this project would yield synergistic benefits to individuals and organizations far beyond what can be accomplished by each alone, and Mr. Freitag has the knowledge, skills and



drive to bring that goal about. NMFS-AKR urges you to fund this project and we may also be able to assist Mr. Freitag with portions of the project if it is funded.

If you have any questions, please contact Ms. Linda Shaw at 907-586-7585.

Sincerely,

Robert D. Mecum

Acting Administrator, Alaska Region

Cc: Ms. Gretchen Hundertmark School of Fisheries and Ocean Sciences University of Alaska Fairbanks P O Box 757220 Fairbanks, Alaska 99775