**ESIP Education Committee Budget Proposal**

The ESIP Education Committee Budget Proposal is composed of four components which are designed to reach out more effectively to educators with ESIP resources while continuing our commitment to deep engagement with educators at ESIP, in addition to supporting the development of a diverse community of ESIP members. The proposal includes two new initiatives which leverage existing networks in the target community ESIP Education is trying to reach, as well as proven approaches to encourage participation through community challenges.

Program Components include:

Project 1 - Institutional Affiliation with NESTA with Teacher Workshops (~120 teachers)

Option 1 - $3,700, Option 2 - $5,000

Project 2 – Support for Teacher Workshop at ESIP Summer Meeting (25 teachers)

Option 1 - $3,750, Option 2 - $5,000

Project 3 – ESIP Educator Challenge - $1,500

Project 4 – Support for Graduate Student Presentation at SACNAS - $1,000

If the money for a particular project isn't used for the specific purposes identified here, it is re-allocated to the ESIP general fund, not repurposed without being approved by FiCom.

**Project 1 - Institutional Affiliation with NESTA with Teacher Workshops**

**Project Description**

1. Community Need

ESIP Education Community seeks an effective way to reach out to a larger audience of Earth and space science and environmental science educators with resources available through the ESIP community. Becoming an institutional affiliate of NESTA will provide a way to significantly increase our engagement with the Earth science education community, getting the word out about our resources and programs, leveraging their publications regularly, be recognized as a resource to educators nationally, and also to participate in community building activities.

As a component of this affiliation, we propose to collaborate with NESTA on the development of a teacher professional development workshop on the use of ESIP data in the context of the Next Generation Science Standards at the three fall 2014 National Science Teachers Association (NSTA) area conferences and the spring 2015 national conference (the NESTA-ESIP Data Workshop for Earth and Space Science Educators, or NESTA-ESIP Data Workshop for short). NESTA has a proven approach for offering professional development for educators that is well received, and is well attended by teachers. Through this collaboration, we will be able to offer the workshop at all four conferences, as a component of NESTA’s suite of workshops at the conferences, and provide professional development to a minimum of 120 teachers during the year. This approach dramatically decreases the cost of offering professional development for teachers (to less than $20/teacher assuming 120 teachers at the four conferences) because it leverages the same workshop content at multiple venues and also does not require funding for teacher participation (either in travel, materials, or stipends). The workshop will be designed so that local ESIP community members will have the opportunity to participate as a co-presenter on the presentation team, if they are available and interested. Alternatively, the workshop can be presented by NESTA leaders presenting at the workshop.

Two budgetary levels are proposed for consideration.

Gold level Institutional Affiliation includes all of the engagement possible through the Silver level described below, but extends that to include participation on the NESTA External Advisory Board, which provides opportunities for ESIP to engage with other leading organizations in providing advice to NESTA on directions, programs, opportunities, and collaborations.

Silver-level Institutional Affiliation includes the activities described below (and are also included in the Gold level Institutional Affiliation).

* Participation by a representative of ESIP Education in the NESTA Partner Leadership Conference
* Monthly announcements in NESTA newsletters (NESTA ENews and Windows to the Universe Earth and Space Science Education Newsletter) about ESIP associated programs, resources, and events, together reaching ~7000 teachers each month
* Support for NESTA programs and awards – in the context of this proposal, $2000 of support from the ESIP Institutional Affiliation will be used to support the costs of the NESTA-ESIP Data Workshop described above (approximately $500 per workshop). Costs include contributions to the costs of shipping of materials, signage, printing, internet, and NESTA presenter travel costs. Engagement at the Gold level would provide the opportunity for additional support for NESTA programs such as topical lectures, receptions and social events, Share-a-Thons, national high school awards for educators, and Field conferences.
* Recognition of support by ESIP through websites, newsletters, signage, announcements and print materials
* Opportunity for subscription by organization’s individual members (interested members of ESIP) to NESTA publications at a discounted rate
1. **Strategic Goal**

The activities made possible as a result of this affiliation align with the ESIP Education Committee’s mission “to increase the quality and value of Earth science products and services for the benefit of science and society” as well as promoting and facilitating “the development, dissemination, and use of Earth science educational products, information, and tools to a broad user community using the wealth of Earth science data and knowledge available in the ESIP Federation.”

NESTA is the largest professional society of K-12 Earth and space science educators nationally, and is the target community that ESIP needs to reach to share information about its resources, programs, and opportunities. The project also aligns with ESIP Education Strategic Goal #1 - Elevate the visibility of the ESIP Federation education community’s capabilities to ESIP partners and educators, scientists, and technologists in the broader Earth system science community.

1. **Leverage**

This affiliation will leverage ESIP’s educational resources as well as NESTA’s reach to significantly broaden the opportunity to reach large numbers of teachers through NESTA’s network and publications with ESIP educational resources. Participation in the NESTA Partners Leadership Conference will provide a venue to address developing issues in geoscience education with other organizations seeking to improve geoscience education, increasing leverage further through the collaborations that develop there. Participation of ESIP at the Gold level will provide opportunities for the ESIP Education Committee to provide advice about future activities of NESTA, leading to future opportunities for collaboration on project with NESTA and other leading geoscience education organizations. Collaboration with NESTA on a data workshop to be offered four times in fall 2014 and spring 2015 will build on NESTA’s network and successful model for professional development, leveraging it to efficiently get ESIP’s message out to teachers.

1. **Collaborators**

ESIP members (including ESIP Education Committee Members) will be able to participate in activities through presentations at workshops, as well as through publications and announcements to the NESTA network.Additional institutional collaborators will be made available through the NESTA Partner Leadership Conference, including major organizations working in geoscience and environmental science education across the country (such as AGU, AMS, NCSE, AGI).

Budget Range: Silver level - $3,700 – 4,999; Gold level - $5000 - $9999

**Proposed Budget**

We propose two options

Option 1 – Silver level with NESTA-ESIP Data workshops - $3,700

Option 2 – Gold level Institutional Affiliation including NESTA-ESIP Data workshops - $5,000

**Budget Justification:** Structure for Institutional Affiliation provided by NESTA (see attachment)

**Project 2 - Conference registration support for Educators attending a workshop at the ESIP Summer Meeting**
1) Description
A) Community Need. Several ESIP members develop educational products for science teachers and this workshop provides an opportunity for those members to easily interact with teachers without having to recruit them or otherwise organize a workshop.

B) Strategic Goals. ESIP teacher workshops align with the ESIP Education Committee mission “to increase the quality and value of Earth science products and services for the benefit of science and society” and also “To promote and facilitate the development, dissemination, and use of Earth science educational products, information, and tools to a broad user community using the wealth of Earth science data and knowledge available in the ESIP Federation.”

C) Leverage. ESIP Teacher workshops leverage:

1) the ESIP summer conference, since members gather in different locations, providing the perfect opportunity to reach a new group of regional educators each year.

2) CIMSS iPad Library—teachers will be able to borrow an iPad for the 2014-2015 school year

D) Collaborators. To date, over two dozen ESIP members have made presentations at ESIP teacher workshops. NOAA & NASA resources are strongly promoted at this event.

Proposed Budget:

We propose two budget levels to consider:

Option 1) holding a 1-day teacher workshop for 25 regional teachers on the day prior to the plenary talks - $150 x 25 = $3750
Option 2) holding a 1.5 day teacher workshop for 25 teachers who can also attend plenary talks before an additional 1/2 workshop that afternoon - $200 x 25 = $5000

Budget Justification:

ESIP Teacher Workshops advance science literacy. Holding workshops for local teachers near locations where ESIP members are meeting involves a very low carbon footprint and aligns with the ESIP Education Strategic Goal #1: Elevate the visibility of the ESIP Federation education community’s capabilities to ESIPESIP Teacher Workshops also align with ESIP Federation GOAL # 1: Increase the use and value of Earth science data and information. Collaborators include NOAA and NASA and other ESIP members. The leveraged activities are educational tools developed by ESIP partners. partners and educators, scientists, and technologists in the broader Earth system science community.

**Project 3 - ESIP Educator Challenge**

The Education committee proposes to create an Educator Challenge to promote the use of ESIP Earth science data, information and educational resources to a broader audience of both traditional educators and non-traditional educators (museums,... ) The challenge invites educators to take ESIP resources and create and implement lesson plans that utilize ESIP member resources. Educators will then create a blog post that explains their lesson to be posted on the ESIPFed.org blog. The ESIP Education committee will review all submissions and vote on their favorite in two categories (classroom (including virtual) and non-traditional). Institutional affiliation with NESTA (Project 1) will be of major assistance in helping to implement the ESIP Educator Challenge, due to their large network of educators.

**Community Need**

Currently, there is a gap between the technical practioners and ESIP educators, but there is tremendous potential value in bridging the gap between ESIP generated data and potential learners in the wider world. In addition, the broader community of science educators would benefit from greater exposure to ESIP produced educational resources.

**ESIP-Fed. Strategic Goals being met by the proposal**

GOAL 1: Be the primary facilitator, coordinating body and advisor to promote the use of Earth science data and information.

GOAL 5: Expand public awareness about the importance and value of Earth science and Earth science information systems.

**Leveraged Activities**

This contest will leverage ESIP member created Earth Science data products and education resources and expose these resources to a broad audience of classroom and non-traditional educators. The contest will also provide content for the ESIP blog - drawing additional readers and building a broader community bridging the gap between educators and technical practioners. Finally, the contest will begin to develop a repository for educational tools and resources developed for and by the ESIP Community.

The contest will provide incentives for teachers to build on the new science standards and may leverage existing NESTA activities that are in place to educate teachers on these standards.

**Collaborators**

ESIP Education Committee members, ESIP member organizations who create educational resources, ESIP Teachers (Teachers who have attended ESIP-Supported Teacher Workshops at the summer meetings), educators not yet connected to the ESIP-Fed.

**Proposed Budget:** $1500

**Proposed Budget Justification**

If this proposal is funded, The ESIP Education Committee will grant two cash awards in each of two categories (four grants altogether). One award category would focus on classroom and virtual educators, the other on informal and non-traditional educators.

**1. Classroom Education:**

ESIP Educational **Innovator Grant:** Submit a standards-based unit consisting of at least three classroom lesson plans or three virtual learning activities that use one or more ESIP resources.  *($500 award)*

    Preference will be given to submissions that:

         -are student-tested

         -incorporate Next Generation Science Standards (NGSS)

         -are ready to be used by other teachers/educators

**ESIP Educational Leader Grant:** Submit a singe lesson (virtual or classroom) that effectively uses one or more ESIP resource to teach a standards-based lesson. *($250 award.)*

**2. Non-Traditional, Informal, and Out of School Time Education:**

**ESIP Educational Designer Grant:** Use published ESIP educational resources or websites to design an educational program that supports an organization's educational goals and/or learners' educational needs. Submit a complete and detailed description of how you used the resources, and a formal evaluation of the program's impact on learners. *($500 award)*

    Preference will be given to submissions that:

         -are user-tested and evaluated

         -incorporate more than one ESIP educational resource

         -are ready to be used by other educators, programs or organizations

**ESIP Educational User Grant:** Use a published ESIP educational resource or website (resources can be found here) to support an organization's educational goals and/or  learners' educational needs. Submit a description of how you used the resource in your work as an educator, and an informal evaluation of the resource's impact on learners. *($250 award)*

**Project 4 – ESIP Graduate Student Scholarship**

Provide one ESIP geosciences award to SACNAS graduate student

Project Description:

A) Community Need. Hispanic, Chicano and Native American scientists are underrepresented in geosciences in general and the ESIP Federation in particular. SACNAS is devoted to advancing Hispanics, Chicanos and Native Americans in Science.

B) Strategic Goals. Sponsoring a SACNAS graduate student award supports the Federation strategic goal, “To develop collaborative relationships with other organizations involved in Earth science related educational activities.” (ESIP Federation Bylaw V, Section 6)

C) Leverage. ESIP Teacher workshops leverage the efforts of any and all ESIP Federation partners in their efforts to promote and increase diversity within their organizations and partnerships.

2. Proposed Budget: $1000

3. Budget Justification:

Approximately 1,500 undergrad & grad students attend the SACNAS annual conference. With sponsor support, SACNAS recognizes exemplary graduate student oral presenters for the quality of their research & presentation skills. Award sponsors make these honors possible. The majority of the awards are given in the Biological and medical sciences. Providing an award in the goeosciences category encourages student research in the geosciences, and provides the ESIP Federation another avenue to recruit high-quality graduate students for the student fellowship program.