

## V. EVALUATION

In the third year of the five-year grant award, the CSCs are evaluated. The evaluation consists of a formal review of the CSCs education, scientific and administrative components. A five-person evaluation team is selected by NOAA EPP to conduct the CSC evaluation at the site of the lead CSC institution and an Evaluation Coordinator is identified. The EPP CSC Evaluation Coordinator is responsible for coordinating all activities associated with the evaluation.

### A. Schedule

The schedules for evaluations of the five EPP CSCs are established in coordination with the CSCs at the end of the second year of a five-year cooperative agreement.

### B. Process

The review consists of three phases:

1. Phase 1: Pre-site evaluation
2. Phase 2: On-site evaluation
3. Phase 3: Post-site evaluation

#### Phase 1: Pre-site evaluation

Six months prior to the CSC evaluation, the NOAA EPP coordinator sends formal invitation letters to prospective evaluation team members.

Five months prior to the CSC evaluation, the five-person evaluation team is identified.

The following package is provided to the team:

1. A brief summary of the CSC evaluation process;
2. EPP performance metrics;
3. Curricula vitas of the evaluation team;
4. The expected time commitment of the evaluation team;
5. Evaluation team responsibilities;
6. A summary of the three-tier (outstanding, satisfactory and unsatisfactory) rating system; and,
7. A template for the final report.

Four months prior to the CSC evaluation, the CSC will draft the briefing booklet and provide the booklet to the Evaluation Coordinator. The briefing booklet shall include the following:

- Draft review agenda;
- One-page synopsis of the CSC;
- List of research themes;
- Latest implementation plan;
- Performance measures and metrics;
- Budget information (break out by research themes, education and outreach and student support);
- Latest financial report;

- Latest performance report;
- Latest student tracker database form;
- Summary / Highlights of CSC Performance;
- CSC organizational chart;
- List of CSC committees and membership;
- Web page URL/other locations for information on CSC; and,
- Other information the CSC deems as useful (e.g., reports from internal CSC evaluations).

Three months prior to the EPP CSC Evaluation, the NOAA EPP Evaluation Coordinator provides the standard evaluation questions to the CSC Evaluation Team and the CSC.

Two months prior to the CSC Evaluation, the CSC finalizes the evaluation agenda. The agenda should include time for the following:

- Evaluation team (education, scientific research and administrative) to have a closed session prior to the start of the on-site evaluation;
- Formal presentations by the CSC Center Director, Distinguished Scientist and the Education and Outreach Lead;
- Education and outreach presentations;
- Science research presentations;
- A student session;
- Time for the evaluation team to discuss particular aspects of the provided CSC data and information with the CSC Center Director, Distinguished Scientist and the Education and Outreach Lead;
- Time for the evaluation team to have a closed session after the formal review activities; and,
- A debriefing and preliminary feedback session with the evaluation team and selected CSC representatives.

Also, two months prior to the CSC evaluation, the CSC finalizes the briefing booklet and provides copies of the briefing booklet directly to the NOAA EPP Evaluation Coordinator and the evaluation team.

At least three weeks prior to the CSC evaluation, the CSC provides responses to the standard evaluation questions. One week prior to the CSC evaluation the review team may provide specific follow-up evaluation questions to the CSC that are to be responded to during the CSC on-site evaluation.

#### Phase 2: On-site evaluation

Up to three days will be allocated for the on-site evaluation that is conducted by a CSC external evaluation team. While at the CSC, the evaluation team conducts a review of the CSCs education, scientific research, and administrative components. The CSC performance is measured against its CSC application proposal and Implementation Plan goals / targets.

### Phase 3: Post-site evaluation

One month after the evaluation, the preliminary CSC Evaluation Report produced by the evaluation team is due to the NOAA EPP CSC Evaluation Coordinator and the Evaluation Coordinator provides the report to the CSC Center Director.

Two months after the evaluation, the NOAA EPP CSC Coordinator receives the final report from the evaluation team and provides the report to EPP Program Director and the CSC Center Director.

### C. Evaluation Team

The five-person evaluation team is comprised of a chair and four team members. The evaluation team will have the following membership:

- Education (Chair) - expertise in developing and leading higher education programs;
- Scientific - expertise relevant to each Center's scientific area (external to NOAA);
- Grants - representative from NOAA's Grants Management Division;
- Administrative - expertise in the management of multi-component education and scientific research programs; and,
- NOAA scientists - expertise relevant to each Center's scientific area.

At the evaluation, the NOAA Line Office technical monitor(s) and EPP representatives will be present as observers.

### D. Education Review

The education review examines the effectiveness of the program to educate, train and graduate students in NOAA mission science, using the EPP Performance measures and the CSC Implementation Plan performance measures at the Center and partner institutions. Education programs will be assessed at the K-12, bachelors, masters, doctorate, and post-doctorate levels. The general elements of the review will include assessments of: (1) adequacy of degree programs / curriculum / courses; (2) student outcomes; (3) faculty outcomes; (4) partner involvement; (5) outreach programs, materials and activities; and, (6) leveraging of education programs. *The CSC is required to provide the NOAA EPP CSC Evaluation Coordinator with responses to a list of standard evaluation questions at least three weeks prior to the review. The questions will address the following areas:*

- *Adequacy of Degree Programs/ Curriculum / Courses;*
- *Student Outcomes;*
  - *Recruitment Strategy*
  - *Mentoring*
  - *Pipeline*
  - *Peer-reviewed Scientific Publications*
  - *Graduation Rates*
  - *Retention Rates*
  - *Employment*
    - *NOAA*

- *NOAA Contractor*
  - *Federal*
  - *State*
  - *Local*
  - *Tribal*
  - *Academia*
  - *Non Governmental Organizations*
- *Faculty Outcomes;*
  - *Recruitment Strategy*
  - *Hires*
  - *Peer-reviewed Scientific Publications*
- *Partner Involvement (Academic & Non Governmental Organizations);*
- *Outreach Programs & Material & Activities;*
- *Leveraging of Education Programs.*

#### E. Scientific Research Review

The science research review will evaluate the quality of the research, using the EPP performance measures, the CSC Implementation Plan performance measures and the quality and effectiveness of the CSC research management at the Center and partner institutions. The general elements of the review will include assessment of: 1) relevance to NOAA science; (2) relevance to the respective NOAA Line Office science; (3) collaborative research strategy, plans and/or procedures; (4) scientific research accomplishments, (5) infrastructure (capacity-building); (6) faculty, student, and Center staff outcomes; and, (7) research resources leveraging. The review will also evaluate the linkages between the CSC strategic or science and Implementation Plans and the NOAA Strategic and Line Office Strategic plans. *The CSC is required to provide the NOAA EPP CSC Evaluation Coordinator with responses to a list of standard evaluation questions at least three weeks prior to the review. The questions will address the following areas:*

- *NOAA Science (relevance);*
- *NOAA Line Office Strategic Plan (relevance);*
- *Collaborative Research Strategy, Plans, and/or Procedures;*
  - *Within the Center*
  - *With NOAA Scientists*
  - *Across the Centers*
  - *With Research Partners external to NOAA*
  - *Among the scientific community*
- *Scientific Research Accomplishments;*
  - *Research to Operations Accomplishments & Deliverables (i.e., models)*
  - *Peer-Reviewed Publications*
- *Infrastructure;*
  - *Communication mechanisms*
  - *Equipment*
  - *Facilities*
- *Roles / Outcomes;*
  - *Senior Scientist / Distinguished Professor / Distinguished Scientist*

- *Faculty*
- *Students*
- *Committees / Boards*
- *Research Resources Leveraging.*

#### F. Administrative Review

The administrative review examines the procedures associated with Center management at the CSC and the partner institutions including: (1) institutional support; (2) communication mechanisms; (3) staffing; (4) compliance with grant management policies and procedures; and, (5) performance measurement. Since the evaluation includes requirements imposed by Federal regulations for managing Federal financial assistance awards, the evaluation team will include NOAA employee(s) with grants management experience. *The CSC is required to provide the NOAA EPP CSC Evaluation Coordinator with responses to a list of standard evaluation questions at least three weeks prior to the review. The questions will address the following areas:*

- *Institutional Support;*
- *Budget / Grant Execution;*
- *Communication Mechanisms;*
  - *Committees / Boards*
- *Sub – Contract Execution;*
- *Capacity;*
  - *Staff*
  - *Office Space*
  - *Facilities*
- *Performance Measurement.*
  - *Plans (i.e., Implementation Plan)*
  - *Center Internal or Academic Program Evaluations*
  - *Performance and Financial Reports*