

# SUSTAINABLE OPERATIONS AND CLIMATE CHANGE UNIFIED TRAINING STRATEGY

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## Introduction

The Eppley Institute for Parks and Public Lands was asked to complete an analysis of training delivery strategies for in the National Park Service (NPS) Park Facility Management Division (PFMD) as a deliverable under its current contract for Facility Management Program Training and Course Support. The analysis, as follows, is the initial action to propose a training strategy which would maximize the training potential of the Sustainable Operations and Climate Change (SOCC) team and outlines an approach to delivery of SOCC training events which have already been developed. The analysis continues to identify possible areas where blended or online learning and new trainings could complete and/or enhance a comprehensive curriculum for SOCC.

## Purpose

A Unified Training Strategy (UTS) ascertains what training and education currently exists, what is needed, and how to coordinate different training efforts to maximize effectiveness and efficiency. Techniques used for this analysis included consultations with staff and a review of reports and relevant documents.

## Background

Published in 2012, the NPS' *Green Parks Plan* proposes nine strategic goals and thirty-four measurable objectives to improve sustainability in the NPS. In order to determine whether an objective has been met, baseline and mitigated measurements need to be taken. To this end, the SOCC has already developed software tools and systems; however, the tools are complex enough that training is necessary to ensure proper use. Currently, the contractors who helped develop a particular tool have also been offering the corresponding trainings, but only on an ad hoc basis. The courses which are currently being offered are:

- Climate Leadership Inventory Program (CLIP)
- Energy Data Reporting Tool (EDRT) and Energy Management Data Reporting System (EMDRS)
- Sustainable Practices Report (SPR) Database
- Energy Star Portfolio Manager
- Green Purchasing

Additionally, training is planned for Sustainability Condition Assessments, but, at the time of writing, this has yet to be developed.

## Preliminary Project Goals

The preliminary learning objectives for this project are listed below:

- Coordinate currently offered trainings into a unified curriculum.
- Consider the application of online learning as a primary delivery method for SOCC.
- Determine the breadth of the supplemental instruction.

- Establish instructor training qualifications.

### Audience

Based on input from the Project Team, the primary users have been identified as those charged with using the aforementioned software tools. Although usually part of the maintenance division, these individuals may cross NPS divisions.

### Recommendations

Below are recommendations for a comprehensive approach to fusing all of the current sustainability training initiatives for the implementation of the Green Parks Plan.

#### Confirm Current Courses Meet Instructional Design Standards

For online or blended (a combination of in person, webinar, and/or online training) education programs to be effective, a course should complete an industry standard instructional design process which includes:

- Identifying what a learner should be able to do or know.
- Organizing information into logical, cognitively manageable clusters.
- Presenting information using a number of different mediums to engage learners and accommodate different learning styles.
- Assessing learners to ensure that learning has occurred.
- Evaluating the training to ensure that the overall program has been successful.

As a critical first step, the current courses should be reviewed to assess whether they currently meet OPM and industry standards for online and/or blended learning. Courses that do not meet the standards should be redesigned using established best practices in instructional design. This information, in the form of recommendations to existing courses, can be used to implement the next stage, coordinating course offerings into a certificate-qualification program.

#### Coordinate Course Offerings into Certificate-Qualification Programs

Once all courses are analyzed for potential blended or online learning modifications, current course offerings are analyzed for combination into the proposed Green Parks Programs (GPP). The GPP would have two components: the first to award individuals who complete the program a certificate in Green Park Planning and Operations; and the second to award various levels of Green Park Qualifications for parks and units. Combining the courses into the GPP will incent individuals to take all courses to obtain a Green Park Planning and Operations certificate (GPPOC) as a finite, achievable goal and recognition for that achievement, and further incent park units to obtain the qualifications (i.e., officially recognized as meeting the essential requirements of Green Park excellence) to be named a NPS Green Park.

To further encourage participants to take all of the trainings, the GPPOC could be listed in DOI Learn as a single "course" which has multiple sessions. For the duration of the course, webinars should be offered weekly or as much as bi-weekly (more frequent is not suggested so as to not exceed the cognitive load of participants) until all sessions have been offered. Two sample schedules appear in Table 1 below:



**Table 1: Proposed Webinar Schedules**

	Weekly Webinar Schedule	Accelerated Bi-Weekly Schedule
Week 1	Climate Leadership Inventory Program (CLIP)	Climate Leadership Inventory Program (CLIP) Energy Data Reporting Tool (EDRT) and Energy Management Data Reporting System (EMDRS)
Week 2	Energy Data Reporting Tool (EDRT) and Energy Management Data Reporting System (EMDRS)	Sustainable Practices Report (SPR) Database Energy Star Portfolio Manager
Week 3	Sustainable Practices Report (SPR) Database	Green Purchasing Sustainability Condition Assessments
Week 4	Energy Star Portfolio Manager	n/a
Week 5	Green Purchasing	n/a
Week 6	Sustainability Condition Assessments	n/a

### Supplement the Current Courses with Additional Instruction

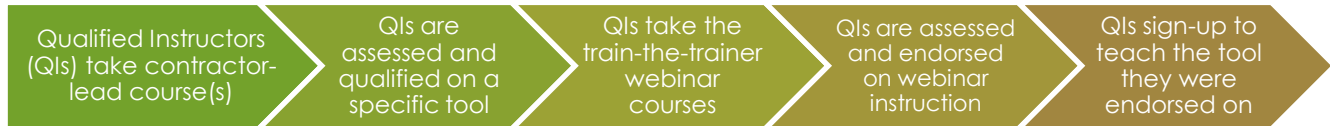
Depending on the level of academic rigor desired, there are a number of ways to further develop the GPPOC and Green Park Qualification. Examples of supplemental instruction might include: standalone e-courses (e.g. PEPC e-courses); independent studies on sustainability topics relevant to the participant; or a capstone project (e.g., writing or revising an Environmental Management System Manual or creating a multi-year PMIS project plan to implement sustainable practices). By broadening the instruction past the aforementioned tools to a greater sustainability education, there is a greater chance for participants to innovate and become sustainability leaders at their park.

### Instructors for the GPPOC

Although contractors currently instruct the webinars for the various tools, a more financially sustainable model would be to use NPS Qualified Trainers. This program, developed by NPS Learning and Development and FMP (as found in Director's Order 33), provides a pathway for NPS employees to enhance their instructional skills and become endorsed to teach a WASO standardized – approved curriculum as a collateral duty. Currently, PFMD has approximately forty NPS staff that have completed the more than sixty-hour National Trainer Development Program (NTDP) to be a Qualified Trainer. All trainers have been qualified on FMSS classroom instruction; sixteen on First Line Supervision classroom instruction; and six have been qualified to teach the PAMP Execution webinar series, which similarly uses an Excel-based tool.

In order to implement the GPPOC as soon as possible, it is recommended that a small group of qualified instructors, preferably those who already have some experience with one of the tools or have already taken the currently offered sustainability training, complete the contractor-lead webinars. These instructors should plan to focus on no more than two tools at this time, in

order to gain sufficient proficiency, which will be assessed either formally or informally. If not already webinar-qualified, instructors will then complete the webinar qualification (two methodology webinars followed by a recorded, practice teaching assignment). With the training schedule already in place, instructors could simply commit to a time slot. In the long-term, sustainability could also be incorporated into the subject matter qualification of the NTDP so instructors who complete that program would immediately be ready to teach for the Green Parks Program. The following diagram summarizes this process:



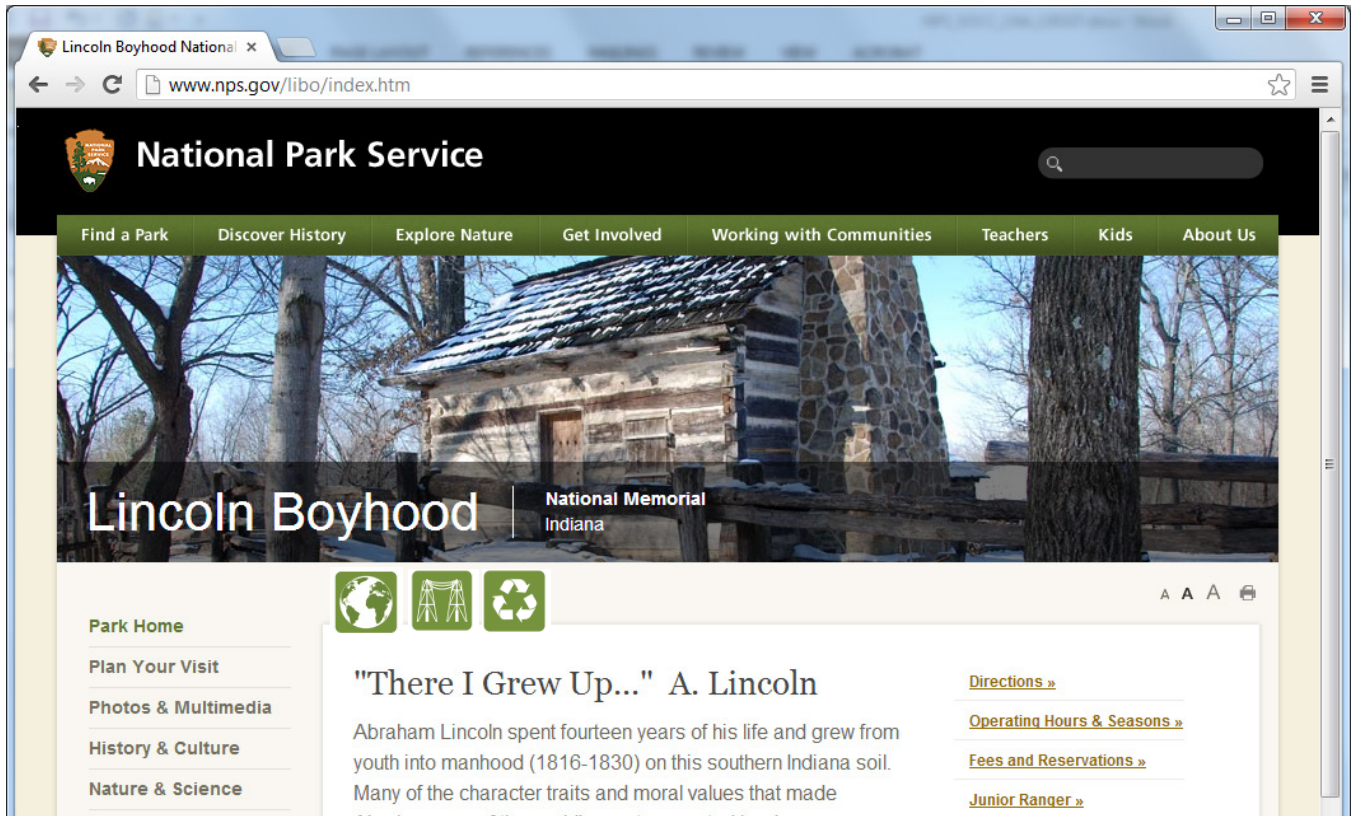
### Park Qualification in GPP: Creating Incentives Service-Wide

To further incent parks and NPS units to implement the Green Parks Plan goals and objectives, the NPS should consider making park attainment of SOCC standards more public through a qualification program, Green Park Qualified. This program will have the combined effect of positive publicity for the park as well as increased public awareness of the Green Parks Plan. For example, for parks that have completed at least 80% of the objectives for a SOCC goal, the park would be considered as meeting this Green Park standard and acknowledged as such by letter, awarded a certificate, and potentially the placement of an associated standard icon (see Figure 1) on the homepage of their park's website. A mockup of this for Lincoln Boyhood National Memorial is displayed in Figure 2 (see the following page).



**Figure 1: Goal Icons**

If users click on the icon on the park's page, they could be taken to a page which describes that goal and its objectives and then shares the story of how that park met each objective. This could greatly motivate parks who want the public to be more aware of the parks efforts to implement sustainable practices and even be woven into parks' interpretive plans.



**Figure 2: Website with Goal Icon Mockup**

### Alignment with NPS Strategic Goals

In addition to meeting the goals of the Green Parks Plan, establishing the Green Parks Program (GPP) recommended above aligns closely with NPS Strategic Goals, specifically the *Call to Action*. The Green Parks Program speaks directly to Preserving America's Special Places and Enhancing Professional and Organizational Excellence, and a case can be made that it also aligns with the goal of Advancing the NPS Education Mission through the "Go Digital" objective. The alignment among these initiatives ensures that the GPP also supports the mission of the NPS.

### Evaluation

Training begins as a response to a need or opportunity in an organization. Evaluating training results brings training full circle to ensure that it has addressed the needs, problems, or opportunities it was originally intended to serve. Specifically, evaluating training goal accomplishments involves determining what outcomes or results have been gained by the organization.

The Eppley Institute, as a best practice and as required by OPM and DOI, uses the first two Kirkpatrick Evaluation levels, Reaction and Learning, to measure training outcomes. All training sponsored by the DOI must be evaluated at Level 1 (effective FY 2008). This level measures the satisfaction of the participants with the program and helps to capture actions to improve training. To assess the Level 1: Reaction, students need to be surveyed on their

satisfaction with the various elements of training. This will be conducted as an optional survey at the conclusion of course sessions and/or the certificate program.

At least 60% of DOI course offerings must be evaluated for Level 2: Learning. This level measures the changes in knowledge, skills, and attitudes of the students and the extent to which new information is learned. This will be accomplished using an assessment (test) at the end of the e-course. To get a completion certificate, the learner must take and pass the assessment with a certain percentage score.

Higher level evaluation could be achieved through 60-day post-evaluation surveys, interviews, or focus groups, if necessary.

### Performance Indicators:

The following are indicators that the training has been successful:

- Positive reaction from the learners as measured in post-course evaluation.
- The ability to recall important information presented in the course as demonstrated by a passing grade on the assessment.
- Ideally, the application of materials, concepts, and tools learned in the course, on the job would be the most positive indication that the training has been successful

### Next Steps

The following items need to be completed in order for this project to move forward:

- Reach consensus on recommendations made in this report and revise as necessary
- Finalize a curriculum of study
- Develop a timeline for implementation of the project

