1. QUALITIES AND SKILLS OF A HIGH FUNCTIONING DIRECTOR | Michael Wolcott

Introduction

Given the unique challenges of large SES-focused projects, the role of the director differs from leading other large science-based projects. First, the director must own and nurture a shared vision for the project within the project team. This will require building and coalescing disparate members that bring a variety of strengths and perspectives to the project. In addition, to effectively bring stakeholders into the team effort, the director will need to continually communicate the project vision to outside parties who have a variety of interests and agendas. Regardless if you have come to this primer because you have a vision for a project that you would like to lead or if you have been drafted by team members or stakeholders around you, the qualities and skills of a high functioning director are the same and will be addressed in this section.

Readiness Check

Before taking on the task of directing a large SES project, you should ask yourself and possibly some close colleagues (who can provide a frank assessment) three very important questions about yourself. Consider this a "readiness check" whether you are pursuing a leadership role or being drafted to do so by others. These initial questions have less to do with your personal qualities and more to do with where you are in your career.

- Do you have sufficient **seniority** in your organization?
- Do you have an established **network of colleagues**?
- Do you have "broad shoulders"?

These questions all pertain to key components of the role that you are now considering.

Seniority: A director of a large SES project must be fully established in his or her career. This is necessary because you will need to work on behalf of others and to withstand controversy that may arise without the concern of reprisal that might jeopardize your tenure or promotion. These considerations are important not only for disputes but also because the director must work to build the success of others within the project. In addition, the very nature of these projects requires that you consider and promote the goals of project participants and stakeholders that are often non-academic in nature. Many of these aspects of the project may be extremely rewarding from a personal standpoint, but they often will not advance your career in the traditional academic sense.

Network of Colleagues: As academics, we are acutely attuned to the stature of colleagues within our own fields. We might understand the leaders in allied areas and most certainly we can read CVs for strong academic potential and performance. But high performing teams are often composed of diverse personalities from varying fields that collectively contribute to the whole. The best team may not necessarily be composed of the stars in each area because of personality conflicts or because specific needs within the project are not squarely aligned with the expertise of known stars. As you form your team, it is vital that you can draw upon your own established network of colleagues whom you know are good performers and team players. The qualities of these team members are often unique because you will be seeking individuals who have established records within the community as well as in their field of science. This does not mean that you must build the entire team by yourself, but you can build your core from an established network and trust them in turn to identify team members from their own networks.

"Broad Shoulders": By this we mean the "ability to take on large and diverse responsibilities across the breadth of the project." As project director, you will not only require academic credentials but, more importantly, you will need leadership skills and a strong work ethic. It is important to know that you are not the only person on the project, or necessarily the most important person. But you will most definitely need to shoulder large responsibilities within the project that go far beyond the typical roles of an academic.

Since large SES projects are often long in duration, you will need to assist and, in some cases, carry the load of others experiencing temporary difficulties for the betterment of the project as a whole. You can expect to see team members move to other institutions, have changes in their assigned duties, and undergo personal difficulties and tragedies. This is not to say that you will need to do everyone else's job, but often you will need to carry an extra load to assist a colleague through difficult times.

Large SES projects almost never unfold exactly as planned or as expected. Since stakeholders are intimately involved, not only in providing feedback but also in identifying needs and direction, the project team is often called upon to redirect its efforts to serve the societal goals rather than team members' academic pursuits and objectives. As director, you will be called upon to mediate such tensions to help your team find optimal routes to success for the project, its personnel, and its stakeholders. To achieve this you will need to serve not only as a facilitator, but as a sales person to bring your team together. This will require that you have both a strong working relationship and the respect of your team and key project members.

Personal Qualities

If you are still reading this document, you most certainly are asking yourself if you, personally, have the qualities needed to lead such a project. Or perhaps you are unsure of what qualities are required. Certainly, successful leaders of large SES project arrive with a diversity of personalities and skillsets but there are some attributes that appear to be universally embraced. Ask yourself and a confidant about the following personal qualities. Are you able to:

- Earn the **respect** of team members of varying professional levels, disciplines, backgrounds, interests?
- Work with **transparency** towards your actions and knowledge?
- Be **flexible** in your ideas and methods?
- Find **humor** in your mistakes?
- Have **thick skin** to withstand the criticism of others?
- Be **unflappable** by a continual set of hurdles that are put in your path?
- Accept successes and praise with humility?

These traits will be required in the leader's role. You will rely frequently on those traits that you possess naturally; cultivate those for which you have aptitude; and be aware of and learn to compensate for those that do not come easily.



A team meeting within the Mesoamerican Agroenvironmental Program (MAP). Credit: Anonymous



All-project meeting for the USDA NIFA sponsored Coordinated Agricultural Project, Pine Integrated Network: Education, Mitigation, and Adaptation Project (PINEMAP). Credit: Brandon Hoover

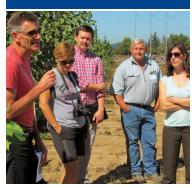
Professional Skills

In contrast to the personal qualities just listed, skills can be acquired through training prior to taking on a leadership role or while in service. Again, be introspective in your assessment of the skills on the following list that you currently possess and those that you will need to develop further.

- **Leadership** there are many forms and styles that will work. Do you have "a style" that can be effective to bring out the best in others to develop an effective collaborative and interdisciplinary project?
- **Knowledge** about the project as a whole. Are you genuinely interested in the general goals and objectives of the project as a whole and also in expanding your knowledge within and outside your own discipline?
- **Attitude** that respects the role and contributions of every member. Do you truly respect and appreciate the abilities, disciplines, and roles of colleages at many levels (staff, students, peers, adjuncts, etc.), as well as the value of non-academic stakeholders and collaborators?
- **Communication** foster internal team communications and externally represent the project and its participants. Are you willing to listen to the input of others and encourage diverse idea exchanges? Do you seek opportunities to make the work of the project and team members known beyond the project?

As director, you will be called upon to fill a unique role. As the face of the project, both inside and outside the team, you will be required to possess a presence, knowledge, and respectful attitude about the efforts as a whole, as well as the stakeholders with which you will be interacting. Inherently, these requirements demand not only a technical knowledge but also strong communication skills and many times a high degree of social

Rick Gustafson, Director of USDA-NIFA sponsored project, Advanced Hardwood Biofuels (AHB), University of Washington. Credit: Anonymous



intelligence. These skills are required, regardless of your personality, but can certainly be fulfilled by many types of people in their own unique manner. It is rare that individuals naturally possess the all of the skills listed above. Rather, they come to their position with a set of strong qualities, a vision for an effort, and an inclination to lead. But their ultimate success will depend upon taking their inate abilities and building upon this foundation with a set of new skills and knowledge. For instance, if you are inherently an extrovert, you might need to develop your listening skills. If you are naturally self assured in your abilities, you might need to develop the ability to accept and trust dissenting opinions or

disciplines. If you are naturally quiet and introverted, you might develop your ability to interact with large groups of stakeholders and colleagues.

Wonderful examples exist for leaders with a wide variety of personality traits. If you have the inclination to lead, regardless of your natural characteristics, you simply need to seek examples that speak to you and work on your deficiencies.

Your Position Description

What should you expect as the director of a large SES project? Now might be a good time to consider and plan for the percentage of time you might be devoting to a variety of tasks. An example is provided below. The range of time percentages will vary depending on your specific project. The time allotted to these various tasks will also vary with the stage of your project; for instance, you will spend much more time on administration when kicking-off the project than later when your efforts are well underway. But the percentage below will give you a rough idea of what to expect.

Administration: 10-20% - Reporting, budgeting, sub-contracting, and sponsor communication. *It will be vital for you to spread the responsibilities of this area to the individual PIs, their staff, and institutions. An experienced staff project manager is crucial to controlling the amount of time that you spend in this area.*

Communication: 30-40% - Representing the project to stakeholders, partners, administration, other team members, and the press. This will include meetings, speeches, and interviews. *You are the voice and face of the project. It is possible to delegate some of these specific opportunities to various team members, but the communication role is vital and inescapable.*

Coordination: 40-50% - Efforts to align and organize the objectives, approach, results, and outputs of the various project components and teams. Emphasis should be placed on building strong connections among stakeholders and social science aspects of the project to the technical thrusts. *The value of large SES projects can be found in their transdisciplinary approach to solving societal problems. You will find few other individuals who have the opportunity and take responsibility to view the project as a whole as you must do as director. Indeed, you may find others who reach an epiphany about that whole sometime into the project, where they say, "I get it now!" But many may never venture far outside their specific area of expertise. Therefore, it will be your responsibility to assure coordination across the project as a whole.*

Research: 10-30% - Conducting or directing specific research components of the project that are germane to your expertise. Many individuals might be attracted to leading a large SES project as a means for procuring funding for their specific research area. As the director, however, your time will be drawn in many directions to fulfill roles that are unique to your position and view of the project. It is important for you to satisfy much of your research curiosity through the Coordination and Communication components of this job description. Ulitmately, it is vital for the director to have a large view of the project, and satisfy his or her intellectual curiosity and professional ambition through the findings of others within the team and the success of the entire team.

Other Duties as Assigned: 10% - A large variety of issues that arise in the project.

Keeping it Manageable: It is almost impossible to find a way to hold the sum of these percentages to 100%; this is because directing a large SES project is all consuming. Your ability to organize and delegate is vital to controlling how much of your life the project will consume. A core team of leaders that can support you is essential (see Section 2, Molding the Team). If your project is large enough, consider organizing your team to include both a Chief Executive Officer or CEO (the Director) and a Chief of Opertations or COO. i.e. two leaders, one focusing outwardly and one inwardly, respectively. Regardless of the structure you adopt, none will work unless you as director have and sustain a true passion for addressing the problem and the approach you and your team have taken.

What to Expect as Project Director

Now that you have done a personal evaluation of your qualities and skills, what should you expect your role and daily effort to be once the project has begun? While every project is unique there are some roles that are common to all efforts.

As director, you are the face of the project to the external world and a champion for the project to a broad set of stakeholders including the scientific community and in society. Thus, you must articulate the vision, importance, achievements, and limitations of the project and your colleagues in terms that resonate with persons representing different sectors and with varying backgrounds, experiences, and knowledge. This includes speaking fluently and authoritatively to media, policymakers, federal agencies, special interest groups, critics of all stripes, educators, and the general public.

Three large project directors, Lois Wright Morton, Tim Martin, and Sanford Eigenbrode attending a meeting sponsored by NIFA-CAP, Regional Approaches to Climate Change for Pacific Northwest Agriculture (REACCH). Credit: Bill Loftus



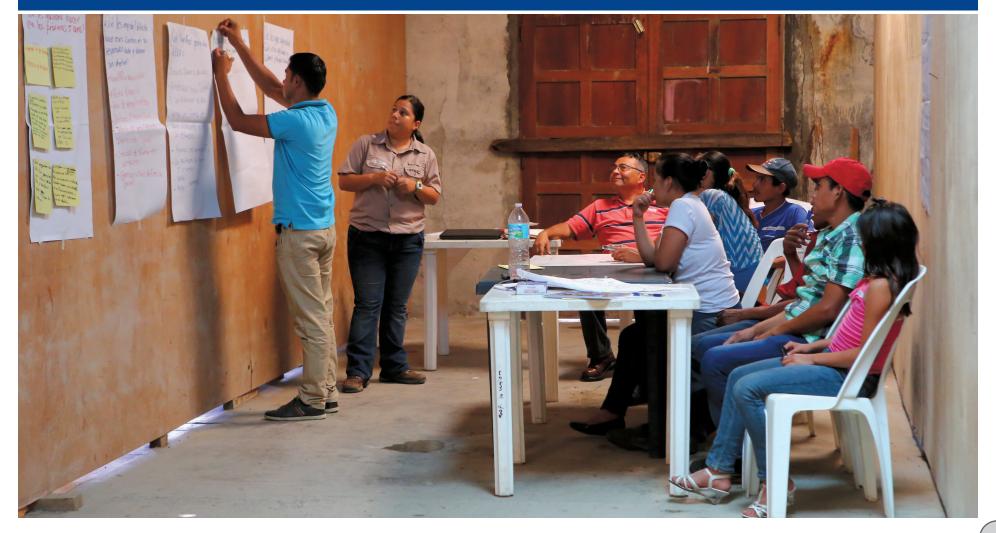
Tim Martin, project director for USDA-NIFA sponsored CAP PINEMAP, directing installation of understory rain shelters. Credit: Jessica Ireland



Obviously, despite the many demands on your time and expertise, you will not be infinitely available at all times to all people. Therefore, you will need to develop a shared and distributed leadership within the project. But one inevitable rule will hold true for you: **the buck stops with you**. So be prepared to be decisive, fair, consistent, and generous in your decisions, time, and knowledge.

Finally, if you are undertaking the extraordinary leadership role for a large SES project, you have already demonstrated your commitment to the importance of these kinds of projects. The professional rewards can be substantial, but they will often seem inadequate in proportion to the challenges, travails and pressures. At those times, it will be important to be able to draw strength and inspiration from your commitment to this kind of science and the importance of pioneering ways to conduct it successfully.

A team planning session within MAP. Credit: Anonymou



Take Away Messages:

Before taking on the task of directing a large SES project, you should ask yourself and possibly some close colleagues some very important questions. Ask the following questions about:

Your career status:

- Do you have sufficient seniority in your organization?
- Do you have an established network of colleagues?
- Do you have "broad shoulders"?

Your qualities:

- Are you able to earn the **respect** of team members of varying professional levels, disciplines, backgrounds, interests?
- Can you work with **transparency** towards your actions and knowledge?
- Are you flexible in your ideas and methods?
- Do you find humor in your mistakes?
- Do you have thick skin to withstand the criticism of others?
- Are you able to be unflappable by a continual set of hurdles that are put in your path?
- Do you accept successes and praise with humility?

Your skills:

- Do you demonstrate leadership?
- Are you knowledgeable about the project as a whole, both within and outside of your own discipline?
- Do you have a respectful **attitude** toward each project participant's contributions?
- Are you able to represent the project and its participants through effective communication skills?

Although you will need to develop a shared and distributed leadership within the project, **the buck stops with you** as project director. So be prepared to be decisive, fair, consistent, and generous in your decisions, time, and knowledge.

A farmer at a USDA-NIFA sponsored REACCH project field day. Credit: Leigh Bernacchi



Planning within MAP. Credit: Leigh Bernacchi



A soil pit during a REACCH field day. Credit: Anonymous

