FAQ's

What is environmental management?

Environmental management system (**EMS**) refers to the management of an organization's environmental programs in a comprehensive, systematic, planned and documented manner. It includes the organizational structure, planning and resources for developing, implementing and maintaining policy for environmental protection. More formally, EMS is "a system and database which integrates procedures and processes for training of personnel, monitoring, summarizing, and reporting of specialized environmental performance information to internal and external stakeholders of a firm."The most widely used standard on which an EMS is based is International Organization for Standardization (ISO) 14001.Alternatives include the EMAS.An environmental management information system (EMIS) is an information technology solution for tracking environmental data for a company as part of their overall environmental management system.

The goals of EMS are to increase compliance and reduce waste:

- Compliance is the act of reaching and maintaining minimal legal standards. By not being compliant, companies may face fines, government intervention or may not be able to operate.
- Waste reduction goes beyond compliance to reduce environmental impact. The EMS helps to develop, implement, manage, coordinate and monitor environmental policies. Waste reduction begins at the design phase through pollution prevention and waste minimization. At the end of the life cycle, waste is reduced by recycling.

Discuss the importance of value education.

Value education is the process by which people give values to others.It can be an activity that can take place in *any* organisation during which people are assisted by others, who may be older, in a position of authority or are more experienced, to make explicit those values underlying their own behaviour, to assess the effectiveness of these values and associated behaviour for their own and others' long term well-being and to reflect on and acquire other values and behaviour which they recognise as being more effective for long term well-being of self and others.There is a difference between literacy and education.

Values education can take place at home, as well as in schools, colleges, universities, jails and voluntary youth organisations. There are two main approaches to values education, some see it as inculcating or transmitting a set of values which often come from societal or religious rules or cultural ethics while others see it as a type of Socratic dialoguewhere people are gradually brought to their own realisation of what is good behaviours for themselves and their community.

Moral education

Morals as socio-legal-religious norms are supposed to help people behave responsibly. However, not all morals lead to responsible behavior. Values education can show which morals are "bad" morals and which are "good". The change in behavior comes from confusing questions about right and wrong.

American psychologist Lawrence Kohlberg who specialized in research on moral education and reasoning, and was best known for his theory of stages of moral development, believed children needed to be in an environment that allowed for open and public discussion of day-to-day conflicts and problems to develop their moral reasoning ability.

Teacher education

Cross has made a start at documenting some teacher training attempts

There has been very little reliable research on the results of values education classes, but there are some encouraging preliminary results.

One definition refers to it as the process that gives young people an initiation into values, giving knowledge of the rules needed to function in this mode of relating to other people, and to seek the development in the student a grasp of certain underlying principles, together with the ability to apply these rules intelligently, and to have the settled disposition to do so Some researchers use the concept values education as an umbrella of concepts that includes moral education and citizenship educationThemes that values education can address to varying degrees are character, moral development, Religious Education, Spiritual development, citizenship education, personal development, social development and cultural development.

There is a further distinction between explicit values education and implicit values education where:

- *explicit values education* is associated with those different pedagogies, methods or programmes that teachers or educators use in order to create learning experiences for students when it comes to value questions.

Another definition of value education is "learning about self and wisdom of life" in a self exploratory, systematic and scientific way through formal education.

What are the steps involved in forming a planning team for environmental planning?

Step One: Getting Started. Not every organization needs the in-depth approach required to create a formal

strategic plan; in many cases, a two-page action plan to get you through the next eighteen months is sufficient. This is especially true of grassroots organizations, all-volunteer groups, and nonprofits in the start-up phase.

Once stakeholders in an organization have decided that a formal strategic plan is called for, the first thing you need to do is to *plan to plan*. Form a planning team. The team should include your board chair and/or ranking board leader, your CEO or executive director, key staff members, and, when appropriate, community leaders. You may also want to include other stakeholders such as long-time program volunteers, vendors, and staff or board members from partnering organizations. If possible, choose your team members for their ability to collaborate. Be wary of stakeholders who seem to have an individual agenda, or who hold fast to predetermined notions.

Next, the team needs to establish an agenda for its first meeting. Topics of discussion should include:

1) Why do we need a strategic plan? Maybe you're a still-young organization struggling to gain traction. Maybe you're facing a critical issue or a changed environment for your services. Or maybe you simply want to continue the momentum developed under your current plan. Whatever your situation, before you can plan effectively you need to understand the reason why you are planning.

2) How far out should we plan? Not too many years ago, the typical strategic plan looked out five years or more. Today, many executives and consultants caution against planning more than two years out. I encourage my clients to do what makes sense for them: If you're a new start-up, think about developing a twelve-month plan designed to put your organization on solid footing; if you've been around awhile and have achieved some stability, a three-year plan might make sense; five-year (or longer) plans are not uncommon for public school systems, municipalities, and larger well-established nonprofits with intensive capital needs. Again, the best advice is to pick

the time frame that's right for your particular organization and circumstance.

3) Should we hire a planning consultant? This question deserves careful consideration. A good consultant will move the process along and keep everyone on track, reducing the opportunities for complaining, finger-pointing, and other types of unproductive behavior.

If you decide to create the plan without the assistance of a consultant, don't, under any circumstance, allow your CEO to moderate subsequent planning discussions. Her (or his) input into the plan is simply too important for it to be diluted by things she will need to say and do in her role as planning leader. Instead, appoint another organizational leader to moderate the discussions and keep the process on track.

4) When do we need to have the finished plan in hand? Your planning timeline should be based on milestones rather than specific dates. Organize the process into stages: basic planning, information gathering, decision making, writing, review, and approval. Some stages will take longer than you think, others may go more quickly. Allow adequate time for each, but don't allow the process to drag. Remember, the point of the exercise is to finish with a workable plan, not meet a deadline.

Step Two: Gathering Information. Once the above questions have been answered, the next task is to gather information that describes your organization's current situation and the environment in which it operates. Planners often call this a situational analysis or audit. Typically, it includes a narrative description of your organization, including its history, values, mission, programs, leadership, staffing, and finances, and, in many cases, something called a SWOT analysis — a detailed description of your organization's Strengths, Weaknesses, Opportunities, and (competitive) Threats. Some organizations take the process a step further and conduct a PEST analysis — an analysis of the Political,

Environmental, Social, and Technical factors currently affecting the organization. Many organizations use both. If your organization is considering a radically different program for the community, is planning to purchase or build a new facility, or is examining the possibility of a merger, then you'll probably want to do both. If, on the other hand, your organization is creating a strategic plan in response to a single issue or challenge, both may not be necessary. The choice will depend on the predisposition of your planning team and your particular circumstance.

Step Three: Decision-Making Time. Once you've gathered the information you need to determine the current state of your organization and its programs and activities, the next step is to make decisions based on that information. It's the responsibility of the planning team, in consultation with other stakeholders, to establish the organization's strategic direction and priorities; to identify goals and milestones on the road to achieving those priorities; and to craft objectives designed to meet those goals. In making these decisions, the planning team should keep its focus on the big picture — the things most likely to result in positive change for the organization. Purchasing a boiler for your building or deciding to increase the size of your mailing list by 5 percent a year will not dramatically change or enhance your organization's prospects and are the kinds of operational decisions best left to staffers.

Step Four: Drafting the Plan. Once the planning team has established your strategic priorities and identified goals and objectives designed to realize those priorities, it's the job of executive management to draft a plan that outlines those priorities and goals, along with any new staff requirements needed to achieve the plan, budgets to support your efforts, and a timeline for turning the vision into reality. The plan should then be reviewed and revised by your planning team and presented to your governing committee for comments, suggestions, and approval. Don't be surprised if members of the governing committee send the draft to others for additional comment; that's their job. When planning for the future, you can't be too

careful. If, for example, your organization operates a community healthcare center and plans to expand its presence by purchasing several buildings over the next few years, you might want to send a draft of your plan to key community leaders who do not have a vested interest in the project and are in a position to attest to the validity of your vision and ambitions. If, on the other hand, your organization is an animal shelter that wants to expand its spay/neuter programs over eighteen months or so, broad community review is probably not necessary. Whether or not to seek community review is largely the prerogative of your planning team. If the basic temperament of the team is conservative and/or it believes your new strategic direction will have a deep impact on the community, then go ahead and offer the community an opportunity to comment.

Step Five: Implementation. The board has reviewed, commented on, and approved your plan. Now the fun begins. I have worked with a number of organizations that have paid handsomely to have their strategic plan bound in Corinthian leather with gold engraving and have literally put the plan on the shelf, never to look at it again. What a waste. A strategic plan, no matter how carefully conceived, is worth very little if it isn't scrupulously implemented.

To ensure that *your* plan is and remains ever present in the minds of your staff, volunteers, and other stakeholders, your governing committee (or its equivalent) should be tasked with monitoring progress toward the goals and objectives laid out in the plan. Direction-setting and -monitoring are core responsibilities of the board and should not be delegated to a planning team or other entity. Instead, the board as a whole should review the plan at regular intervals and, if necessary, suggest adjustments to keep the organization on track.

Discuss the following:

a) Comprehensive Planning Approach

b) Adaptive Planning Approach

a) **Comprehensive planning** is a process that determines community goals and aspirations in terms of community development. The outcome of comprehensive planning is the Comprehensive Plan which dictates public policy in terms of transportation, utilities, land use, recreation, and housing. Comprehensive plans typically encompass large geographical areas, a broad range of topics, and cover a long-term time horizon. The term comprehensive planning is most often used by urban planners in the United States.

In Canada, comprehensive planning is generally known as strategic planning or visioning. It is usually accompanied by public consultation. When cities and municipalities engage in comprehensive planning the resulting document is known as an Official Community Plan or OCP for short. (In Alberta, the resultant document is referred to as a Municipal Development Plan, or MDP.)

Comprehensive Planning typically follows a planning process that consists of eight different steps. By following this process, planners are able to determine a wide range of interconnecting issues that affect an urban area. Each step can be seen as interdependent and many times planners will revise the order to best fit their needs.

Identifying issues

The planner must first address the issue they are investigating. "To be relevant, the planning process must identity and address not only contemporary issues of concern to residents, workers, property owners, and business people, but also the emerging issues that will be important in the future."[1] Generally, planners determine community issues by involving various community leaders, community organizations, and ordinary citizens.

Stating goals

Once issues have been identified by a community, goals can then be established. Goals are community visions. They establish priorities for communities and help community leaders make future decisions which will affect the city. Stating goals is not always an easy process and it requires the active participation of all people in the community.

Collecting data

Data is needed in the planning process in order to evaluate current city conditions as well as to predict future conditions. Data is most easily collected from the United States Census Bureau, however many communities actively collect their own data. The most typical data collected for a comprehensive plan include data about the environment, traffic conditions, economic conditions, social conditions (such as population and income), public services and utilities, and land use conditions (such as housing and zoning). Once this data is collected it is analyzed and studied. Outcomes of the data collection process include population projections, economic condition forecasts, and future housing needs.

Preparing the plan

The plan is prepared using the information gathered during the data collection and goal setting stages. A typical comprehensive plan begins by giving a brief background of the current and future conditions found in the data collection step. Following the background information are the community goals and the plans that will be used in order to implement those goals into the community. Plans may also contain separate sections for important issues such as transportation or housing which follow the same standard format. [2]

Creating implementation plans

During this stage of the process different programs are thought of in order to implement the goals of the plan. These plans focus on issues such as cost and effectiveness. It is possible that a variety of plans will result from this process in order to realize one goal. These different plans are known as alternatives.

Evaluating alternatives

Each alternative should be evaluated by community leaders to ensure the most efficient and cost-effective way to realize the community's goals. During this stage each alternative should be weighed given its potential positive and negative effects, impacts on the community, and impacts on the city government. One alternative should be chosen that best meets the needs and desires of the community and community leaders for meeting the community goals.

Adopting a plan

The community needs to adopt the plan as an official statement of policy in order for it to take effect. This is usually done by the City Council and through public hearings. The City Council may choose not to adopt the plan, which would require planners to refine the work they did during previous steps. Once the plan is accepted by city officials it is then a legal statement of community policy in regards to future development.

Implementing and monitoring the plan

Using the implementation plans defined in the earlier stages, the city will carry out the goals in the comprehensive plan. City planning staff monitor the outcomes of the plan and may propose future changes if the results are not desired.

A comprehensive plan is not a permanent document. It can be changed and rewritten over time. For many fast

growing communities, it is necessary to revise or update the comprehensive plan every five to ten years. In order for the comprehensive plan to be relevant to the community it must remain current.

b) **Adaptive management** (AM), also known as **adaptive resource management** (ARM), is a structured, iterative process of robust decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring. In this way, decision making simultaneously meets one or more resource management objectives and, either passively or actively, accrues information needed to improve future management. Adaptive management is a tool which should be used not only to change a system, but also to learn about the system . Because adaptive management is based on a learning process, it improves long-run management outcomes. The challenge in using the adaptive management approach lies in finding the correct balance between gaining knowledge to improve management in the future and achieving the best short-term outcome based on current knowledge.

There are a number of scientific and social processes which are vital components of adaptive management, including:

1. Management is linked to appropriate temporal and spatial scales
2. Management retains a focus on statistical power and controls
3. Use of computer models to build synthesis and an embodied ecological consensus
4. Use of embodied ecological consensus to evaluate strategic alternatives
5. Communication of alternatives to political arena for negotiation of a selection

The achievement of these objectives requires an open management process which seeks to include past, present and future stakeholders. Adaptive management needs to

at least maintain political openness, but usually aims to create it. Adaptive management must therefore be a scientific and social process. It must focus on the development of new institutions and institutional strategies in balance with scientific hypothesis and experimental frameworks (resilliance.org).

Adaptive management can proceed as either **passive adaptive management** or **active adaptive management**, depending on how learning takes place. Passive adaptive management values learning only insofar as it improves decision outcomes (i.e. passively), as measured by the specified utility function. In contrast, active adaptive management explicitly incorporates learning as part of the objective function, and hence, decisions which improve learning are valued over those which do not (Holling 1978; Walters 1986). In both cases, as new knowledge is gained, the models are updated and optimal management strategies are derived accordingly. Thus, while learning occurs in both cases, it is treated differently. Often, deriving actively adaptive policies is technically very difficult, which prevents it being more commonly applied.