



New Jersey Department of Environmental Protection

Development of an Intelligence-Led Strategic Management System

A New Paradigm for Compliance and
Enforcement

FINAL REPORT

August 19, 2011

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August 19, 2011

Wolfgang Skacel
Assistant Commissioner
Compliance and Enforcement Program
New Jersey Department of Environmental Protection

Dear Assistant Commissioner Skacel:

It is our pleasure and privilege to present to you, on behalf of the Strategic Management System (SMS) Team, our final report: Development of an Intelligence-Led Strategic Management System - A New Paradigm for Compliance and Enforcement.

Our Team has worked diligently since late March to provide this final report to you, which includes our final recommendations. The report updates the issues presented to you in the White Paper dated June 1, 2011, and includes additional research and work performed by the Team to build Compliance and Enforcement's SMS and develop our key recommendations to deploy the SMS.

We believe the recommendations in our final report could be implemented in the Compliance and Enforcement Program, as appropriate, in accordance with the time line proposed in this report. The recommendations are introduced in the executive summary section of the report and presented in more detail in each of the appropriate sections.

We would like to take this opportunity to commend you for your leadership in establishing our Team and entrusting us to create a new paradigm for C&E in furtherance of Commissioner Martin's DEP-wide transformation efforts and initiatives. You have been generous in furnishing staff and other resources to our Team in order to ensure our success and for that we are very grateful. We look forward to your feedback and additional recommendations.

Respectfully submitted,

The Strategic Management System Team

LIST OF ACRONYMS

AC	Assistant Commissioner
BSC	<i>Balanced Scorecard</i>
C&E	Compliance and Enforcement Program
DEP	New Jersey Department of Environmental Protection
EIC	Environmental Intelligence Center
EPA	United States Environmental Protection Agency
GIS	Global Information System
GMAP	Government Management, Accountability and Performance
HUC	Hydrological Unit Code
ILP	Intelligence-Led Policing
MAC	Management Accountability Conferences
NJDEP	New Jersey Department of Environmental Protection
NOV	Notice of Violation
OPRA	Open Public Records Act
RCRA	Resource Conservation and Recovery Act
ROI	Return on investment
ROIC	Regional Operations and Intelligence Center
SEP	Supplemental Environmental Project
SMS	Strategic Management System
USGS	United States Geological Survey

GLOSSARY OF TERMS

Balanced Scorecard

A type of strategic planning and management system that is used extensively in business and industry, government, and nonprofit organizations to align organizational activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals.

Cascading

This term as used in the *Balanced Scorecard*, refers to translating the corporate-wide scorecard (referred to as Tier 1) down to first business units, support units or departments (Tier 2) and then teams or individuals (Tier 3).

Customer

Someone that uses a product, transfers a product, or fixes a product.

Data / Information

Information in its raw state, prior to analysis.

Goals:

Also referred to as “strategic themes” in *Balanced Scorecard* literature, are large-scale, overarching focus areas that define what the organization needs to strive for to succeed in fulfilling the mission/vision statement.

Initiative

The most specifically defined component of a *Balanced Scorecard* strategy.

Input measures

Simple *performance measures*, like funding, people, equipment, going into a *system*.

Intelligence

Information or data that has been analyzed.

Leading and Lagging Indicators / Measures

A type of performance measure. A leading indicator gives a signal before the new trend or reversal occurs. A lagging indicator gives a signal after the trend has started.

Meaningful Compliance

Compliance with appropriate regulations that result in demonstrable and/or measurable environmental protection, pollution prevention, and non-compliance deterrence.

Measurable

A quantitative value can be assigned based on a method that is sufficiently well described to be repeatable and for which the quantitative value determined by any

application of that method will not differ significantly from the value determined by any other application of that method.

Metric

Term essentially interchangeable with performance measure.

Objective

A more specific strategy step than *goal*, but less precise than the specific on-the-ground tactics used to achieve success. Objectives are the bridge between the broad, overall philosophical end result(s) the organization needs to achieve to be successful and the tactical operations used to attain them. Objectives must start with a verb and be measurable.

Outcome Measures

A type of performance measure in which actual effects are measured.

Output Measures

Also called activity measures, are a type of performance measure. An output measure is just raw numbers or data that result from an activity.

Performance Measurement

The process whereby an organization establishes the parameters within which programs, investments, and acquisitions are reaching the desired results.

Perspective

One of usually four different lenses through which strategy is viewed in BSC. Perspectives are used when developing strategy maps.

Strategic Management System (SMS)

Utilization of resources, to enhance the performance of firms in their external environments or a level of managerial activity under setting goals and over tactics Basically, an SMS is a system in place to provide a guiding overall framework to an organization.

Strategy Map

A visual tool used by organizations to communicate both their strategy and the processes and systems that will help them implement that strategy. Strategy maps show the cause-and-effect between objectives to achieve desired outcomes.

Sustainability

Defined by the Brundtland Commission of the United Nations: “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

System

A process that produces a product that is delivered to a customer to achieve some desired outcome(s).

Target

The result aimed for in a *BSC* strategic component, usually an *initiative*.

Widget

Something created by work, which can be given to someone else to achieve a desired outcome.

EXECUTIVE SUMMARY

Environmental enforcement in New Jersey and across the nation has accomplished much in its roughly 40-year history. Early on the problems were more obvious, and the environmental gains were correspondingly more tangible. However, over the years, C&E programs have increasingly operated more independent of one another leading to “silos” that did little to focus on environmental problems or foster communication among them. Funding methods, mandates and complex regulations have taken precedence and have reinforced these silos resulting in tunnel vision and diminishing environmental improvements.

In recent years, declining budgets and staff as well as declining practices of blatant disregard for the environment are prompting a push for more strategic planning and more precise measurements of success and progress towards goals. Exponential leaps in environmental improvement will not be the norm in the present era, and this reality demands a paradigm shift in C&E’s management style and operations. More recently, DEP was also challenged to recognize the inherent ties between environmental protection, societal needs and the economy of the State.

In order to meet the demands of environmental protection in the 21st century, C&E has no other alternative, but to focus the organization on issues truly important to the mission of environmental health and safety for the public, and restoring and protecting the environment. Going forward, maintaining high but meaningful compliance, finding and fixing problems and obtaining better behavior from others will be the three key driving measures behind C&E’s success in accomplishing its mission. These measures, which will ensure C&E fulfills its full potential and role in the Department’s overall mission, represent the expectations of our external stakeholders as articulated at several meetings held by C&E.

To accomplish this monumental task, in March 2011, the Assistant Commissioner for C&E formed an internal team and charged it with developing a strategic management system (SMS) for C&E that will develop priorities and allocate resources to achieve the best environmental outcomes as reflected in the three key performance measures. The adoption and implementation of this system will significantly overhaul C&E's operations by improving overall effectiveness and efficiency.

The changes C&E is committed to undertaking in order to adopt a strategic style of management are bold and courageous and will position the program as a national leader in environmental enforcement and compliance. Deviating from the current modus operandi and transitioning into a SMS / intelligence led enforcement system will result in a paradigm shift or transformation and necessitate a major culture change for all C&E staff.

Using a SMS, C&E will become a results-driven organization, with defensible, line-of-sight goals and supporting strategies and priorities driving organizational responsibilities. C&E will be customer focused, finding new and innovative ways to achieve desired and expected results. The SMS will also allow for resource flexibility to enhance overall environmental protection and improvement. Measurements will be broadly based to track success and overall environmental improvements. This SMS will give C&E the ability to go beyond compliance, to be dynamic in its approach to environmental protection and to strive for excellence.

While engaging in this effort it is important to embrace historical successes to maintain momentum. This system will improve current operations, ensure no backsliding, reduce minutiae and strategically simplify C&E's overall approach for both internal and external stakeholders.

This final report is organized into three parts. Part One describes the development of a Strategic Management System for C&E based on the *Balanced Scorecard* framework. Part Two introduces four main recommendations with several sub-recommendations

which arose under the lens of Strategic Management. Lastly, Part Three sets forth a path for success.

Part One – Development of a Strategic Management System

This section describes the journey and culture change that the SMS team underwent in the process of developing the steps needed to build the first stage, or development phase of the *Balanced Scorecard*.

The SMS team conducted extensive research into current trends in strategic management in the private sector as well as government and non-profit organizations. Several meetings were dedicated to formulating the best strategic management system fit for C&E and its transformation decree. The team decided to adopt the *Balance Scorecard (BSC)* and Strategy Mapping style of strategic management developed by Kaplan and Norton and introduced in their 1992 Harvard Business Review article.

A *Balanced Scorecard* is a management system that allows an organization to align mission and vision with day-to-day operations. *BSC* allows an organization to view organizational performance from different perspectives or lenses used to achieve a much desired balance. The five key perspectives selected by the team are:

- **Citizen Stakeholder:** *If we achieve our vision, what is the environmental return on investment to our shareholders?*
- **Customer:** *To achieve our vision, what customer needs must we serve?*
- **Internal Systems:** *To satisfy our customers and shareholders, at which enforcement processes must we excel?*
- **Learning and Capacity:** *To excel in our processes, what must our organization learn?*
- **Investment and Funding:** *To support our operations, how can we best utilize funding and investment resources?*

Development of a BSC consists of the development phase and the implementation phase. The SMS team was charged with building a BSC. With the completion of the first six steps described in this report, the team has completed the development of C&E's

“Corporate”-level scorecard, which will be referred herein as the Tier 1 *BSC*. The Tier 1 scorecard will set the basis for cascading the *BSC* throughout the program.

Part Two - Recommendations

1. Adopt and Implement Strategic Plan and *Balanced Scorecard*

First, the SMS team recommends adoption and implementation of the revised Strategic Management Plan, included in Appendix B, and the *Balanced Scorecard* framework proposed in this document. Creating ongoing high-level management support of strategic management and cascading of the SMS throughout the organization is paramount for its success. Cascading refers to the development of lower level scorecards for divisions and bureaus within C&E. Cascading should take place in a tiered fashion from upper-level management down, becoming more specific for individual bureaus and units. Some refinement of the Strategic Management Plan and the BSC will likely be necessary, but their development by a team that effectively represented all C&E programs and staff levels argues for cautious and limited changes. At a minimum, modifications should be entertained only after rigorous communication and education efforts and with involvement of the SMS team.

1.1 Appoint a Strategic Manager to oversee the SMS process

Study of other strategic management efforts identified the need for a single role responsible for managing the overall SMS process to ensure success. Accountability meetings must be regularly planned, held, supported and facilitated according to strategic management best practices. The team suggests this role could be assigned to the lead of a new Environmental Intelligence Center (recommendation 2).

1.2 Contract for expert assistance for training and implementation

While the SMS team made great effort to learn and adopt the *Balanced Scorecard* process it was entirely self-taught. Conversations with experts in the field of strategic management emphasized the need for properly trained professionals to manage the

process.¹ It is recommended that professional expertise be secured to assist significantly in the implementation phase, including review of the team's work products, formal training and assistance to plan the roll-out for the whole organization. Effective training and communication will ensure that the SMS is understood by staff at all levels. It is important to clarify the culture change experienced by the SMS team in developing the Strategic Management System and that this change is an anticipated outcome of the *Balanced Scorecard* process.

1.3 Retain SMS Team and C&E's Transformation Steering Group throughout implementation

The team should remain in its current format in a consulting capacity with the steering group until such time as the SMS is fully functional. Once functioning, the SMS will fulfill the two original objectives of the C&E Transformation Steering Group, which were to manage the large scale change initiative within C&E and formalize the group's work into C&E's continuous improvement system. Once the SMS is fully functioning, both teams can be dissolved.

2. Staff a new unit: the Environmental Intelligence Center

Secondly, as part of strategic management, the team recommends creation of a new unit whose functions include: leveraging our data collection capabilities and data systems, integrating C&E and Department goals and objectives into day-to-day operations and collaborating with internal and external partners. This unit would be an environmental intelligence center (EIC) that prioritizes and supports C&E functions with intelligence information created through data collection and analysis.

The EIC would consist of three units: Watch Operations, Analysis and Asset Management. Following guidance from national models, the team recommends an initial staffing of six positions growing eventually to a total of eleven. Several key positions will require highly skilled and specialized staffing. Significant investment either in new

¹ April 21, 2011 personal interview with Major Thomas P. Soucek, former Task Force Commander, New Jersey Regional Operations Intelligence Center, NJSP and telephone interview with Lisa Schumacher, City of Charlotte, Budget and Evaluation conducted on July 23, 2011

hires or time and training to develop expertise internally should be anticipated. These new positions must work closely with four existing roles for programming, data quality, systems analysis, and communications.

2.1 Develop and analyze a C&E-wide work plan to clarify mandates and resources

Currently, mandated assignments are described as the limiting factor to pursue any new strategic initiatives. During its organizational evaluation, the team sought information to develop a C&E wide perspective on workload related to current mandates. It was unable to translate the information it found into a C&E-wide work plan for analysis. The SMS team strongly recommends the first assignment to the EIC be the development of the information to identify what resources are needed and available for new initiatives.

3. Restructuring and alignment of C&E staff through an ecological and holistic approach

Thirdly, the SMS team recommends that C&E's organizational structure be re-aligned to support the new strategic focus dictated by the SMS, its goals and objectives. This restructuring will eliminate silos of activity and information and enable a more holistic, place-based, enviro-shed type approach.

The team urges a commitment to complete re-alignment for the whole organization executed through deliberate, methodical steps that consider the challenges to staff and implications for other stakeholders. The current Departmental initiative for improving the Barnegat Bay should be leveraged for a focused launch of the re-alignment effort. The Barnegat Bay watershed should serve as the physical boundary to determine an initial re-alignment of staff.

4. Focus new change initiatives on the Inspection and Problem Investigation systems

Fourth, the team recommends a continued, deliberate and methodical approach to improving C&E's systems of work as resources and capacity allow. The team repeated a system prioritization effort done by C&E's steering group in February 2011. However, this time the system prioritization was done in the context of the newly refined strategic

plan. This effort largely reinforced the previous priorities but made clearer that two systems in particular, the Inspection and Problem Investigation systems, are significantly more critical than the others to achieve the objectives and goals under strategic management. The SMS team's analysis also revealed previously unconsidered systems that must be part of the full transformation picture.

Part Three – Conclusion and Anticipated Concerns

The path to strategic management and Intelligence-led enforcement will require understanding, anticipation of, and strategic response to future changes. Being aware of the overall malleability of this proposal will allow for revisions as targets and initiatives evolve and priorities are met and/or restructured.

It is important to allow for mistakes along the way. Successful implementations of strategic management that were studied represent a minority of those attempted and have in common consistent high-level support, despite many setbacks. Along with understanding, leaders overseeing successful efforts have also demonstrated a keen sense of when issues demand more debate and when they do not.

Operation of intelligence-led enforcement within the framework of a Strategic Management System will allow for C&E to do the right things, prioritizing the big picture and taking into account state and DEP goals. Overall, if the strategies proposed in this report are embraced by DEP and C&E management, the program will have the ability and tools to achieve high but meaningful compliance, to garner better behavior from others resulting in better environmental protection or outcomes, to find, clarify and fix environmental problems and to maintain deterrence while ensuring no backsliding on past environmental gains.

INTRODUCTION

In March 2011, the Assistant Commissioner for the Compliance and Enforcement Program in the New Jersey Department of Environmental Protection (DEP) chartered a team to develop a strategic management system, or SMS. This system represents a new paradigm for C&E and will serve as a framework to accomplish C&E's mission and implement its vision. The system will also align organizational strategy with day-to-day operations. Through the SMS, management will identify and prioritize critical strategic functions within C&E and develop a performance budget that ensures appropriate and strategic funding and staffing for C&E.

This report presents the development of a strategic management system for C&E, based on the *Balanced Scorecard* approach.

In January 2011, it was clear that New Jersey was facing an unprecedented fiscal crisis that impacted all levels of government, and all citizens of the State of New Jersey. State agencies were ordered to focus on "mission critical" functions and transform themselves to remain relevant. DEP was challenged to recognize the inherent ties between environmental protection, societal needs and the economy in pursuit of a sustainable state. This required focusing limited resources on issues truly important to the mission of environmental safety for the public, and restoring and protecting the environment.

For C&E this meant a top-to-bottom reevaluation of itself which was accomplished via the formation of an internal Transformation Steering Group. This group encouraged employee participation by including employees chosen by their peers to be members and reviewing more than 300 employee comments. Meetings were recorded, and external stakeholder meetings were held to remain transparent throughout. From the meetings, it became clear that our stakeholders expected certain environmental results from C&E, and that C&E's role needed to be expanded beyond traditional compliance and enforcement in order to deliver those results. The three key results that C&E is

expected to deliver are: high but meaningful compliance, finding and fixing problems and better behavior from others. These results must be pursued while maintaining deterrence and without backsliding on previous environmental gains.

A. C&E's Transformation Steering Group and C&E's Systems of Work

In early 2011, C&E's Transformation Steering Group identified seven "systems of work" that are responsible for all of C&E's current operations and two new systems that would be required, if C&E were to operate strategically while delivering environmental results. The listing of systems developed by the Steering Group is included as Table 2 in Part Two of this report.

The Steering Group identified one of these new systems as the pinnacle of the "systems of work" and defined it as a "Strategic Management System" for C&E. This new system would translate the results that C&E is expected to deliver into the organization's guiding *strategy*, set enforcement priorities within and across C&E programs, adapt to emerging issues of importance to NJDEP and C&E's mission, and finally measure and communicate results effectively. The second new system was described by the Steering Group as a Department-wide strategic management system. This system would be similar to the strategic management system envisioned for C&E; however, it would be developed at the highest management level of the DEP and would guide the entire organization.

B. The Strategic Management System Team

In March 2011, the Strategic Management System Team was created to further the overall C&E transformation efforts and implement the recommendation of the C&E Transformation Steering Group by developing a SMS for C&E. Candidates were interviewed, carefully evaluated and appointed by the Assistant Commissioner for C&E, who also sponsored the team. Some of the team members are also part of the Steering Group, others were recommended by Steering Group members and/or their peers and managers. The team's membership is diverse and cross-functional. Members include each level of management and staff encompassing all programs

across C&E, some outside of C&E, with varying media expertise and differential experience. This diversity ensures the development of a SMS that will be amenable to and “owned” by all staffing levels and all programs within C&E. As stated by Rohm and Halback² “Let them build it and they will use it.” It must be noted that using the people responsible and accountable for performance and results to build the SMS will yield better results than creating a team comprised of high-level managers only.

C. Project Objectives

The project objectives are outlined in the SMS Team Charter, included in this document as Appendix A. The team was tasked with creating a strategic management system that will allow C&E to set and adjust priorities and allocate resources to achieve the best environmental outcome and benefit. These objectives must be accomplished while ensuring deterrence, allowing no backsliding of previous environmental gains, and delivering the expected results: high but meaningful compliance, better behavior from others, and finding and fixing problems. The SMS must be built to recognize and successfully counter objections over breaking convention that could be seen as undermining laws or creating an uneven playing field for the regulated community. The system must also allow for the use of holistic and multi-media enforcement approaches. It must acknowledge mandates and regulations but needs to also seek creative ways to satisfy these obligations and/or pursue appropriate modifications. The SMS should allow C&E to adopt an approach that responds to needs quickly, effectively and consistently and allow for enforcement relevancy. The system must be built such that it will be understood and supported by all staffing levels as well as valued throughout C&E and the DEP.

² Rohm, Howard, and Larry Halbach. "A Balancing Act: Sustaining New Directions." *The Balanced Scorecard Institute*. Perform Magazine, Volume 3, Issue 2. Web. 03 Mar. 2011
<<http://www.balancedscorecard.org/Portals/0/PDF/perform.pdf>>.

D. Project Scope and Approach

C&E's Assistant Commissioner, Wolf Skacel, responded to the recommendations of stakeholders and the Transformation Steering Group by sponsoring the formation of a SMS Team. The project scope for developing such a system incorporated all programs within C&E. The team's recommendations apply specifically to programs, projects, initiatives and systems that fall within the direct jurisdiction of C&E only. However, it is anticipated that successes in implementation experienced with these programs will ultimately be translated and applied to all DEP enforcement efforts as well as those of our agents and partners.

As part of this project, the team updated C&E's Strategic Plan and designed the strategic management system based on the *Balanced Scorecard* framework. *Balanced Scorecard* consists of two phases: the building phase and the implementation phase. This team's efforts focused on the building phase of a first level, "Corporate"/Tier 1 *Balanced Scorecard* only. The second phase or implementation will follow and may be led by others. That phase will entail cascading the Tier 1 *Balanced Scorecard* and developing Tier 2 and Tier 3 scorecards. The specific approach used by the team to develop a strategic management system for C&E is clearly described in Part One of this report.

E. Guiding Principles

As per the mission statement, NJDEP's core mission is the protection of the air, waters, land and natural and historic resources of the state to ensure continued public benefit. This is advanced through the effective and balanced implementation and enforcement of environmental laws to protect these resources and the health and safety of our residents. Accordingly, C&E's mission states "We are dedicated to ensure that New Jersey's environment is clean, safe, enjoyable, preserved and enhanced for future generations." These principles have guided the development of a strategic management system for C&E that aligns DEP and C&E's core missions with day-to-day operations resulting in environmental improvements for the benefit of all New Jersey residents.

F. Background

Environmental enforcement in New Jersey has accomplished much in its roughly 40-year history. Early on the problems were more obvious, and the environmental gains were more tangible. Many of the accomplishments resulted from instances of thoughtful and strategic planning that allowed the Department to abate serious pollution problems involving air, water, land and other natural resources. However, for the most part, these natural resources were targeted independently of one another leading to “silos” of individualized activity that did little to foster communication between divisions or programs. Funding methods and specific mandates have reinforced the silos resulting in tunnel vision.

In recent years, declining budgets and staff, and a decline in practices of blatant disregard for the environment are prompting a push for more strategic planning, greater return on investment of C&E efforts, and more precise measurements of success and progress towards goals. For C&E, strategic planning, data analysis and effective measuring of results define the critical difference between being busy, and being effective. There is a general consensus that clear priorities, effective use of data, and measurements of success are lacking.

There have been some impressive efforts by the DEP and C&E in the past to achieve strategic planning and measure progress towards goals. There are a variety of reasons why these efforts could not be sustained including but not limited to: changes in administration and planning formats, large numbers of success measures, and a lack of measurement and reporting. Some planning efforts listed a number of priorities or goals with no clear strategies, measures or success indicators. Essentially, the absence of a SMS resulted in an inability to execute these valid relevant goals because there was no framework for tying them to our core mission values and no effort to properly measure our efforts towards them.

PART ONE

DEVELOPMENT OF A STRATEGIC MANAGEMENT SYSTEM

Extensive research was conducted into current trends in strategic management in the private sector as well as government and non-profit organizations. Research included numerous sources such as books, journals and articles found either as hard copies or internet sources. The SMS team gathered information through interviews of current C&E management and staff, and a field trip to the New Jersey State Police Division Headquarters. The trip included a tour and interview with Major Thomas P. Soucek (retired), the Task Force Commander of the Regional Operations and Intelligence Center (ROIC) in Trenton, New Jersey, regarding the “Intelligence-Led Policing” strategic management system employed by the NJ State Police. It is important to add that numerous internal and external stakeholders specifically expressed interest in intelligence-led policing as a strategic management model for C&E. The team valued NJ State Police’s methods and experience enough to seek to imitate it by creating an *environmental* intelligence center (EIC) for Compliance and Enforcement. An EIC, detailed as the second recommendation in Part 2, will serve as the cornerstone instrumental to implementing the SMS.

Other key models of strategic planning reviewed were the U.S. Department of Justice’s strategic plan, the GMAP model prepared by the National Governor’s Council and a critique of the Swedish police force’s strategic efforts. However, it needs to be emphasized that the vast majority of our work was informed and guided by the work of the creators of the *Balanced Scorecard*, Professor Robert S. Kaplan and Dr. David P. Norton, several key articles written and published by the *Balanced Scorecard Institute*, the work of Paul R. Niven and Professor John M. Bryson and the intelligence-led policing model.

Conceptual meetings of the strategic management team were dedicated to formulating a method of strategic management that would serve as a guideline to develop a system to best fit C&E and its transformation decree. These early brainstorming sessions, coupled with the myriad of research efforts, led to the decision to adopt the *Balance*

Scorecard (BSC) and Strategy Mapping style of strategic management developed by Kaplan and Norton and introduced in their 1992 Harvard Business Review article. As previously noted, additional papers by Howard Rohm of the *Balanced Scorecard Institute* and Paul R. Niven, author of several *BSC* books, provided the guidance and the template for development of a *Balanced Scorecard* strategic management system for C&E.

The *BSC* has a proven record of success overall and is the current industry standard. Considering the increased accountability, transparency, and metrics usage that must occur, as mandated by the current administration and management at DEP, a strategic framework of some sort must be employed. The *BSC* and accompanying strategic map provide a perfect vehicle for metrics usage and identify key items and timing for accountability and transparency initiatives.

A. Development of a *Balanced Scorecard* for C&E

The process of developing a *Balanced Scorecard* for C&E can be best described as a journey of learning and self discovery that required an in-depth assessment of C&E, its flaws and strengths, coupled with a mission and vision for the future. It is important to note that strategic planning and management is not an end in itself, the system will only succeed if it helps key decision makers and the rest of the organization, think and act strategically. Strategic management is all about a paradigm shift and embracing a culture change.

As noted in *A Balancing Act*, by Howard Rohm³, “Doing the right things and doing things right is a balancing act, and requires the development of good business strategies and efficient operations to deliver the products and services required to implement the strategies.” One of the frameworks that assist in accomplishing the balance between strategy and operations is the *Balanced Scorecard*.

³ Rohm, Howard. "A Balancing Act." *The Balanced Scorecard Institute*. Perform Magazine, Volume 2, Issue 2. Web. 03 Mar. 2011. <<http://www.balancedscorecard.org/Portals/0/PDF/perform.pdf>>.

A *Balanced Scorecard* is a management system that allows an organization to align mission and vision with day-to-day operations. *BSC* allows an organization such as C&E to view organization performance from different perspectives to achieve the desired balance.

The SMS team adopted the *Balance Scorecard Institute*⁴'s Nine-Steps to Success™ framework. The nine steps are depicted in Figure 1 on the following page and will be described in detail in the following section. According to this framework, developing a *BSC* consists of two phases: the building stage and the implementation stage. The first six steps are used to build the *BSC* and the last three are used to implement the system. With the completion of the first six steps described in this report, the team has completed the development of C&E's "Corporate" level scorecard, which will be referred herein as the Tier 1 *BSC*. As will be seen later, the Tier 1 scorecard will set the basis for cascading the *BSC* throughout the program.

⁴ Rohm, Howard, and Larry Halbach. "A Balancing Act: Sustaining New Directions." *The Balanced Scorecard Institute*. Perform Magazine, Volume 3, Issue 2. Web. 03 Mar. 2011. <<http://www.balancedscorecard.org/Portals/0/PDF/perform.pdf>>.



Figure 1: Adapted by the Balance Scorecard Institute from Robert S. Kaplan and David P. Norton, "Using the *Balanced Scorecard* as a Strategic Management System," *Harvard Business Review* (January-February 1996): 76

B. Phase 1: Building C&E's *Balanced Scorecard*

For this effort to succeed, prior to initiating the process, it is critical that there be an agreement and commitment from key internal decision makers and perhaps external stakeholders about implementing an overall strategic planning effort for the organization. In the case of C&E, this was accomplished by obtaining the direct support from our stakeholders as well as receiving a mandate and full commitment from C&E's Assistant Commissioner, the team Sponsor, for the team to develop a strategic management system for C&E.

STEP 1 – Self Assessment

This step is the most comprehensive and entails performing an in-depth self assessment of the organization. To accomplish this task, the SMS team reassessed C&E's current Strategic Management Plan, which had been developed by management in 2005. For the purpose of this assessment, the team focused at first on the Mission, Vision for the Future and Values of the organization and decided that it was appropriate to revise the Mission and Vision as a result of the new strategic focus of the *BSC*. As will be seen in Steps 2 and 3, the team later realized that it was also necessary to reassess and update the 2005 Goals and Objectives in order to incorporate the results of this self-assessment phase. The updated Strategic Management Plan is included as Appendix B.

The team also performed an assessment of the internal and external environments that influence the organization. To better understand the internal and external environment, the team reviewed the comments and recommendations provided by our external and internal stakeholders during the course of several stakeholder meetings conducted in December 2010, and early 2011. In addition, the team reviewed and evaluated hundreds of comments submitted by C&E staff relating to C&E and DEP's overall transformation efforts.

One of the key elements of any organizational self- assessment is the completion of a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). The team performed a SWOT analysis, recognizing C&E's strengths and weaknesses resulting from the internal environment as well as the opportunities and threats presented by the external environment. Several SWOT analysis conducted by C&E managers in the past were used as a baseline and were incorporated into the current analysis, as appropriate. Further, the team interviewed C&E management and staff in an effort to better understand the current key drivers of C&E's operations and work plans. It was no surprise the team found that the majority of the day-to-day operations are driven by mandated obligations from the USEPA, statutes and regulations. It was determined that an effort to evaluate the potential future role of mandates within a strategically-focus and environmental results oriented C&E would be critical to better

understand the functions and operations that would remain relevant under a *Balanced Scorecard* framework. To accomplish this task the team launched an effort to evaluate the work plans for each major program in C&E and interviewed a selected set of managers to better understand which C&E activities and what percentage of the overall work plan are driven by mandates. However, after some level of effort, the team quickly recognized that pursuing this effort would be a monumental undertaking and was beyond the scope of this project. Therefore, the team recommends that an identification and evaluation of C&E's mandates for effectiveness and relevancy, within the context of a strategy-focus organization, be performed following the conclusion of this project and as part of the *BSC* implementation phase. Alternative motivating forces and creative initiatives to displace the identified ineffectiveness and lack of relevancy will have to be developed, if appropriate, and presented to management, our peers and stakeholders. These alternatives, if developed, must ensure no backsliding and/or loss of funding.

To finalize the Strategy formulation, the team reviewed and evaluated DEP's Mission and Vision, as articulated by our current management, and incorporated and aligned all appropriate elements and mandates into C&E's Strategic Plan.

STEP 2 – Strategy and Goals

Strategy: In this step, the *Strategy* of the organization is developed. For the SMS team, this meant translating the findings of the self assessment conducted in Step 1 into overall *Strategic Themes* or in this case *Goals*, that will guide C&E operations. These Goals are balanced by five perspectives, which were developed by the team specifically for this project (see Figure 2). As per the *Balanced Scorecard Institute*⁵, "The balanced scorecard suggests that we view the organization from four perspectives, and develop metrics, collect data and analyze it relative to each of

⁵ Rohm, Howard, and Larry Halbach. "A Balancing Act: Sustaining New Directions." *The Balanced Scorecard Institute*. Perform Magazine, Volume 3, Issue 2. Web. 03 Mar. 2011.
<<http://www.balancedscorecard.org/Portals/0/PDF/perform.pdf>>

these perspectives: Learning & Growth, Business Process, Customer, and Financial”. It is important to understand that it takes several perspectives to truly understand an organization. Perspectives can be interpreted as different lenses through which strategy is viewed.

In the basic *BSC* design and traditional *BSC* perspectives framework, the financial perspective is placed at the top of the perspectives. This representation highlights the fact that for businesses, the “bottom line” is to deliver profits for their shareholders. In the case of government and not-for-profit organizations, the basic structure is changed to reflect the mission-driven nature of these organizations. For C&E, these structure variations included changing the relative position of the perspectives and adding a fifth one representing the citizens and stakeholder perspective. This new perspective is now placed at the top, whereas the financial perspective is located on the bottom. The location of the financial perspective at the bottom does not imply that funding objectives are not important to our organization. Rather, it is done to emphasize that the key and desired outcome for C&E is to deliver environmental results. It is important to note, that our mission and expected results could not be accomplished without funding; however, citizens’ financial investment, mainly in the form of taxes and fees, is turned into desired outcomes, namely environmental results and improvements and a better quality of life for all New Jerseyans. Therefore, in a sense, our organization is similar to private businesses, if we introduce the term environmental return on investment (ROI). Ultimately, we strive to maximize the ROI for our “shareholders”, namely the citizens of the State. The SMS team identified the following five key perspectives for C&E:

- **Citizen Stakeholder:** *If we achieve our vision, what is the environmental return on investment to our shareholders?*
- **Customer:** *To achieve our vision, what customer needs must we serve?*
- **Internal Systems:** *To satisfy our customers and shareholders, at which enforcement processes must we excel?*
- **Learning and Capacity:** *To excel in our processes, what must our organization learn?*
- **Investment and Funding:** *To support our operations, how can we utilize resources?*

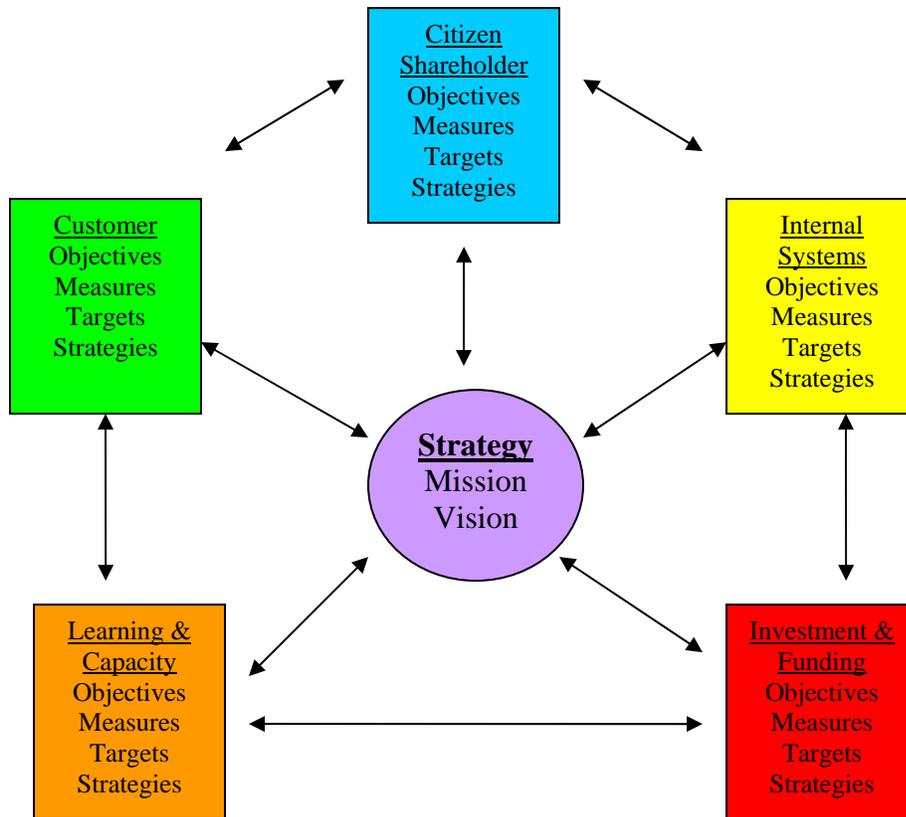


Figure 2: Compliance and Enforcement's Key Strategic Perspectives

GOALS: Using C&E's and DEP's Mission and Vision, the organization's self-assessment, stakeholder expectations and the five perspectives above, the SMS team identified the following strategic Goals:

GOAL 1: Build and maintain organizational excellence

GOAL 2: Collaborate with partners critical to C&E's mission, goals and objectives

GOAL 3: Use science and data analysis to determine priorities and measure progress in achieving meaningful environmental health and safety objectives

GOAL 4: Achieve high and meaningful compliance and foster sustainability

GOAL 5: Communicate effectively to ensure transparency and accountability

STEP 3 – Objectives

This step is about breaking down the Goals (strategy) into smaller components or objectives. Objectives have been described by various authors as the DNA or building blocks of Strategy. The team developed seventeen Objectives for C&E and they are the following:

GOAL 1

- Objective 1.1 Create and integrate a strategic management system (SMS) into day-to-day operations
- Objective 1.2 Ensure that management and staff function as a team to pursue C&E's goals and objectives
- Objective 1.3 Ensure staff at all levels understands the strategic management system and are supported in new and modified roles
- Objective 1.4 Engage employees at all levels by finding the best alignment between staff's skills and the needs of the organization
- Objective 1.5 Ensure appropriate and stable fees and funding

GOAL 2

- Objective 2.1 Align C&E's objectives and initiatives with DEP's overall priorities
- Objective 2.2 Improve communication between C&E and other DEP programs
- Objective 2.3 Explore and pursue two-way collaboration, job sharing and delegation opportunities with our internal and external partners to reduce C&E workload, and improve efficiency

GOAL 3

- Objective 3.1 Create and deploy an intelligence-led enforcement system that allows C&E to identify and focus on priorities and finding and fixing environmental problems
- Objective 3.2 Identify functions that no longer align with C&E's goals and objectives

Objective 3.3 Adopt the NJDEP’s Cumulative Impacts model and use it to drive geographic targeting for multi-media enforcement activities

GOAL 4

Objective 4.1 Conduct relevant, consistent, and fair enforcement while maintaining deterrence and ensuring no backsliding

Objective 4.2 Expand capabilities beyond enforcement to achieve environmental results

Objective 4.3 Ensure processes address the needs of the regulated community, our stakeholders and the general public

Objective 4.4 Find and fix problems

GOAL 5

Objective 5.1 Ensure our partners and stakeholders understand the SMS, its goals and objectives

Objective 5.2 Develop effective ways to clearly and timely communicate C&E actions, measures and results

Compliance and Enforcement’s 2011 Strategic Plan, listing the identified Goals and Objectives is provided as Appendix B.

STEP 4 – Strategy Mapping

The next step in developing a *Balanced Scorecard* is mapping the organization’s strategy. As Kaplan and Norton⁶ noted in their article “Having Trouble with Your Strategy?”, “*The key to executing your strategy is to have people in your organization understand it – including the crucial but perplexing processes by which intangible assets will be converted into tangible outcomes.*” This is exactly the purpose of creating a strategy map. Staff at all levels within C&E must have a clear understanding of what they do and why those functions are important. A strategy

⁶ Kaplan, R. S. and Norton D. P. (2004). *Strategy Maps: Converting Intangible Assets into Tangible Outcomes* Boston: Harvard Business School Publishing.

map is a visual framework for depicting relationships between the overall objectives of an organization and showing how the objectives, taken together, accomplish desired goals, mission and vision and drive performance. For C&E this meant creating a strategy map by connecting the seventeen objectives using cause and effect relationships and placing them within one of the appropriate five major perspective categories: citizen and stakeholder, customer, internal systems, learning and capacity and investment and funding. The map is built from the top down along the five perspectives starting with the end in mind and building bridges to get there. Figure 3 shows the strategy map developed for C&E. The strategy map can also be depicted in table form as shown in Table 1.

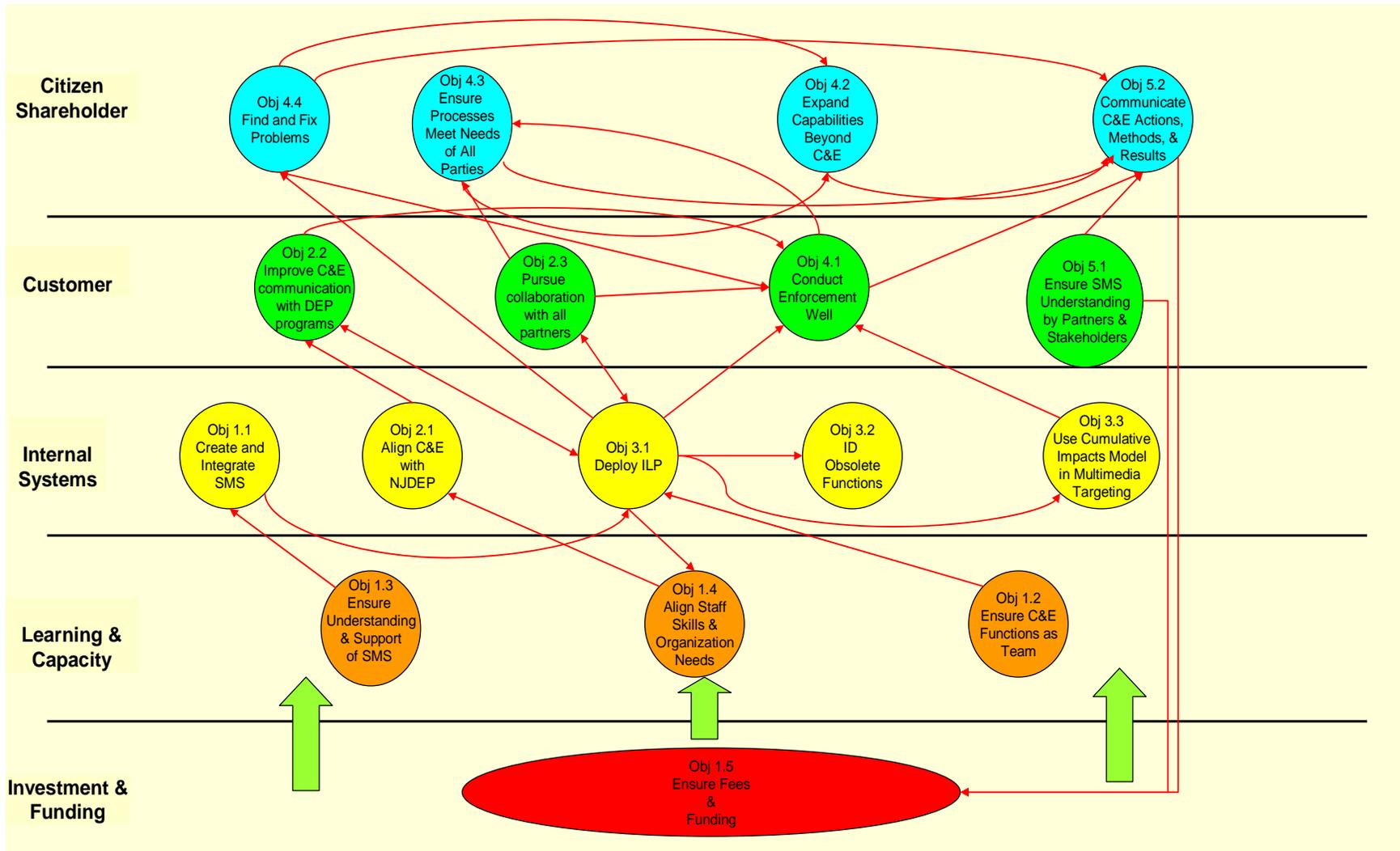


Figure 3: Strategy Map for Compliance and Enforcement

STEP 5 – Performance Measures and Targets

In this step, the team used the strategy map created in Step 4 to develop performance measures using the five perspectives of the *BSC* approach. Performance measures will allow C&E to measure each strategic objective and assess progress toward achieving these objectives and ultimately C&E's Mission and Vision. Success and progress of the Goals, and Objectives is to be measured consistently and reliably.

The team used a variation of The Logic Model, which allows for the development of four types of measures: inputs (what we used to produce value), processes (how we transform inputs into products and services) outputs (what is produced) and outcomes (what is accomplished). The team developed at least two or more measures for each objective along with targets and initiatives. It is important to note that developing meaningful performance measures, specifically outcome type measures, has proved to be a very challenging task. To help in this effort, the SMS team agreed to identify a set of environmental results/indicator type of measures. Links to these must be sought throughout the process of cascading (step 8), when following through on goals and objectives, and while initiating targets and strategies through prioritization.

The team would like to acknowledge that it takes time to establish appropriate measures, and that the set of measures presented in this document might not be the most appropriate or perfect this first time around. However, as we will see under Step 9, *BSC* and strategic management is a dynamic process that requires reevaluation and adjustments along the way, and naturally, performance measures will evolve as our management becomes more experienced in using them to evaluate our progress and success.

Table 1 below depicts preliminary measures, targets and initiatives developed by the team for the Objectives under Goal 1 with the understanding that they are subject to change, when appropriate. A complete set of measures is included as Appendix C.

5.2. Develop effective ways to clearly and timely communicate C&E actions, measures and results

4.1. Conduct relevant, and consistent, enforcement while maintaining deterrence and ensuring no backsliding

3.1. Create and deploy an intelligence-led enforcement system that allows C&E to identify and focus on priorities and finding and fixing environmental problems

1.2. Ensure that management and staff function as a team to pursue C&E's Goals and Objectives

1.5. Ensure appropriate and stable fees and funding

<u>Measure</u>	<u>Possible Target (s)</u>	<u>Possible Initiative(s)</u>	<u>Possible Projected Date(s)</u>	<u>Possible Owner</u>	<u>BSC Perspectives</u> <i>Cross ref to other measures and</i>
5.2.1. Timeliness and effectiveness of accountability reports	Increase by XX# or XX%	A. Track time B. survey stakeholders for effectiveness	A. Commence immediately B. Include survey with each appropriate action, beginning in 90 days	EIC team member	Citizen Shareholder
4.1.1. Overall compliance rate for facilities measured over time.	Reduce by XX% over life of facility. In other words, a just found site or a brand new facility should show an increase in compliance as a result of continued inspections.	Ascertain baseline data. This may already be occurring. Data must be gathered. Successful facility models must be compared to unsuccessful ones to see cause of dif.	Baseline data gathered within 90 days. Further dates TBD.	EIC team member	Customer
3.1.1. Targets identified and addressed (i.e., geographic, sector, non-attainment or other env. factors, GIS, community concerns, other)	Increase by XX#	A. Use GIS systems B. Use volunteer data. C. Est. other sources	A. & B. Establish initial and ongoing data sharing by six months, re-review at schedule TBD C. TBD	EIC team member	Internal Systems Supports 3.3.2. Supported by 4.4.all.
1.2.2. Effective meetings with appropriate partners	Increase by XX# or XX%	Track using meeting success criteria	90 days to track to establish baseline. Quarterly tracking afterwards. Annual target goals	EIC team Member along with Bureau Chiefs	Learning & Capacity Supports 2.2.2
1.5.1. Appreciation of environmental ROI by stakeholders	Surveys, group dialog at stakeholder meetings.	Secure environmental economics analysis	One year: baseline analysis and establish methodology Annual report follows, info disseminated	EIC team member	Investment & Funding Supported by 5.1.1. & 5.1.2.

Table 1: Another representation of C&E's strategy map

STEP 6 – Initiatives

In this step, Initiatives are developed to support the Objectives and to ensure that C&E's Objectives and strategic Goals are accomplished. During cascading of the scorecard (Step 8), each management level in C&E will develop their own scorecard, with objectives, measures and initiatives. Some Initiatives were developed by the team for the Tier 1 *BSC* and are included in Appendix C under C&E Objectives.

C. Phase 2: Implementation of the *Balanced Scorecard*

Now that the pieces of our *BSC* have been built, the *BSC* must be deployed to truly transform C&E into a *Strategy-Focused* organization as envisioned by Kaplan and Norton when creating the *Balanced Scorecard*. Implementation of the *BSC* will translate intangible strategy into tangible operational terms.

The SMS team was charged with creating a strategic management system, and the process followed by the team and described in the preceding pages has accomplished that mandate. Developing the next 3 steps and implementing the *BSC* are beyond the scope of this project. However, the last three steps in the *Nine Steps to Success™* framework created by the Balance Scorecard Institute are briefly described below to give the reader of this report a better understanding of the magnitude, complexity and effort that it will take for C&E to be successful. The steps are:

STEP 7 - Automation

As the name implies, this step deals with automating the *BSC* system. The team recommends that this task be evaluated at a later date by the team to be charged with the implementation phase. It is anticipated that the envisioned EIC and staff already engaged in data quality and systems analysis will be critical to the execution of this step.

STEP 8 - Cascading

This step involves cascading the Tier 1 *BSC* developed by the SMS team to the rest of the organization. The next levels are Tier 2 and Tier 3 scorecards to be developed by the Directors and Bureau Chiefs, respectively. The basic cascading process for C&E entails developing Tier 2 *BSCs*/Tier 2 objectives that connect with Tier 1 objectives and Tier 3 *BSCs*/Tier 3 objectives that connect with Tier 2 objectives. As the *BSC* is cascaded, objectives become more operational and less strategic. However, since all of the objectives are connected up the chain to the Tier 1 level, the original strategy developed for C&E will be accomplished.

STEP 9 - Evaluation

At this step, a complete reassessment and evaluation of the original strategy as well as every element developed within the *BSC* must be performed to determine the success of the strategies and make adjustments accordingly. This includes an evaluation of goals, objectives, measures, targets and initiatives.

This concludes the development of a Tier 1 *Balanced Scorecard* for C&E. The following section will focus on key recommendations, and proposed implementation phases.

PART TWO

RECOMMENDATIONS AND IMPLEMENTATION PHASES

A. Recommendations

1. C&E Wide Adoption and Implementation of a SMS

The SMS team recommends that Compliance and Enforcement adopt the *Balanced Scorecard* version of a Strategic Management System coupled with the drafted Strategic Plan. Cascading and enhancement of the Tier 1 SMS as adopted by the team is essential to ensure its effectiveness across all program areas within C&E. To ensure efficient cascading throughout all staff levels and across all program areas, each Bureau is to develop its own unique *Balanced Scorecard* for ultimate incorporation into the C&E wide system. Each Bureau will be charged with developing initiatives and timeframes to ensure objectives are met and goals are continuously pursued.

Communication, education and cascading of the SMS throughout all staffing levels of C&E will contribute to its success. Tailored training should be developed to assure the needs of managers, supervisors and staff are met precisely. Such training will contribute to the overall and ultimate understanding of the *Balanced Scorecard*, and operating strategically with C&E goals and objectives at the forefront. It is a recommendation that C&E engage in a professional *Balanced Scorecard* training company, or certify a small number of staff to facilitate the overall understanding of Strategic Management within C&E promptly.

The team recommends appointing a “Strategic Manager”, to oversee all aspects and ensure success of the SMS. Managers will own and be responsible for carrying out a fully cascaded strategic plan, but the Strategic Manager will monitor, guide and alert leadership to any lapses in implementation of the SMS overall. It is also the team’s recommendation that the Strategic Manager also serve as the EIC Chief, described further below. If, however, resources allow and needs dictate a benefit to make these roles separate and distinct, this team recommends that option be further explored.

It is the recommendation of the SMS team that the Steering Group continue to serve C&E in an advising capacity. The current functions of the SMS team and the Steering Group should be extended to providing oversight of the *Balanced Scorecard* and the Strategic Plan until a strategic style of management is established throughout C&E. These teams will aid in the roll out and ensure the bridge from development to implementation is realized.

2. Creation of an Environmental Intelligence Center (EIC)

“The argument will be made that the implementation of intelligence-led practices within environmental compliance and enforcement programs can act as a significant force multiplier, by encouraging proactive compliance measures and reducing program resource inefficiencies.”⁷

The SMS team recommends the creation of an intelligence-led enforcement program within C&E that leverages our impressive data collection capabilities, uses our data systems to develop intelligence products, integrates C&E and DEP goals and objectives and collaborates with our internal and external partners. The EIC will be a centralized program that will have broad and clear authority over intelligence-related functions of C&E. The EIC will (a) take a leading role in guiding and directing C&E data collection efforts, (b) conduct dedicated strategic analysis that extracts intelligence from all C&E programs, external sources, as well as across DEP programs, (c) increase information and intelligence sharing across C&E and DEP; and, (d) ultimately, create intelligence products to drive planning and allocation of resources within C&E. It must also be emphasized that one of the most significant roles for the EIC will be to guide and support management in their new roles and functions resulting from C&E’s adoption of a strategic management style with a focus on meeting C&E’s Strategic Objectives.

⁷ Compliance, Enforcement and Innovation Neil Gunningham, Professor, Regulatory Institutions Network and School of Resources, Environment and Society, Australian National University

As envisioned above, the EIC will play a critical role within C&E. Therefore, the team strongly recommends that the EIC reside under the direction of the Assistant Commissioner. This is illustrated in Figures 4 and 5 below.

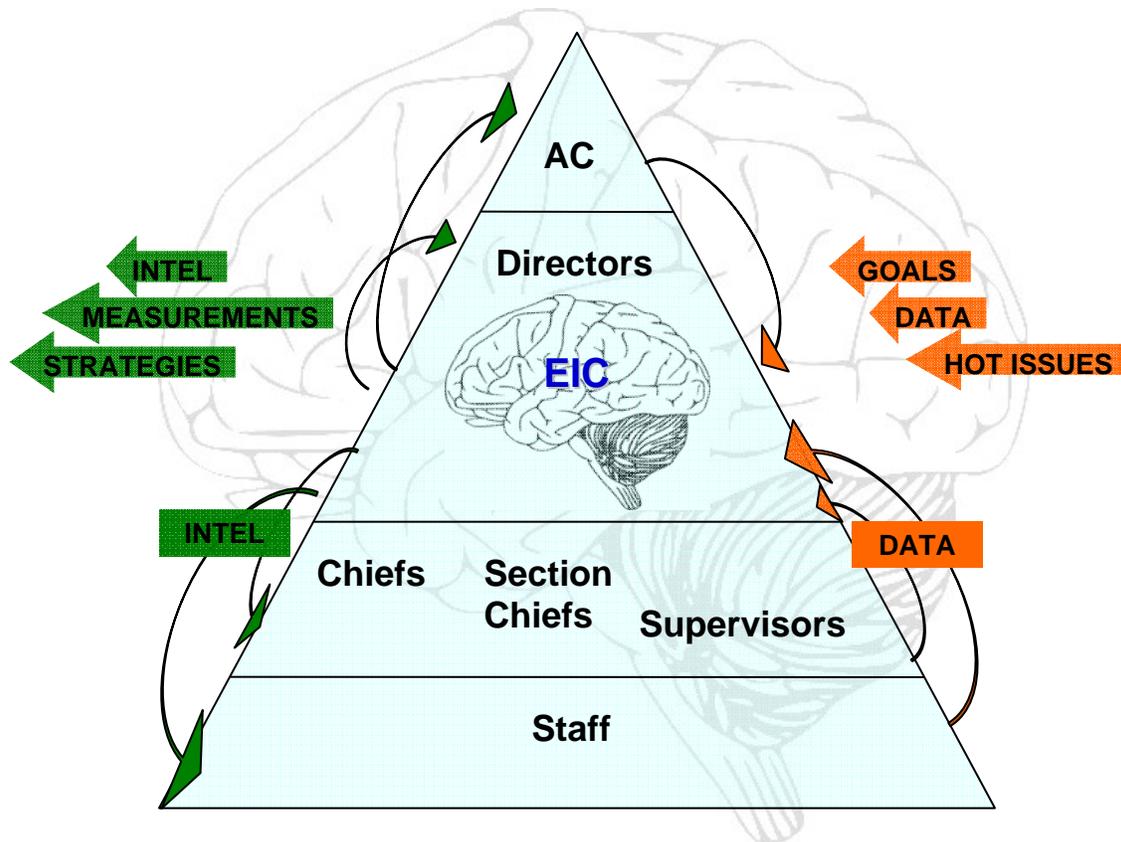


Figure 4: Future organizational structure – Implementation to begin September 2011 with the development of Environmental Intelligence Center (EIC) and Strategic Management System (SMS)

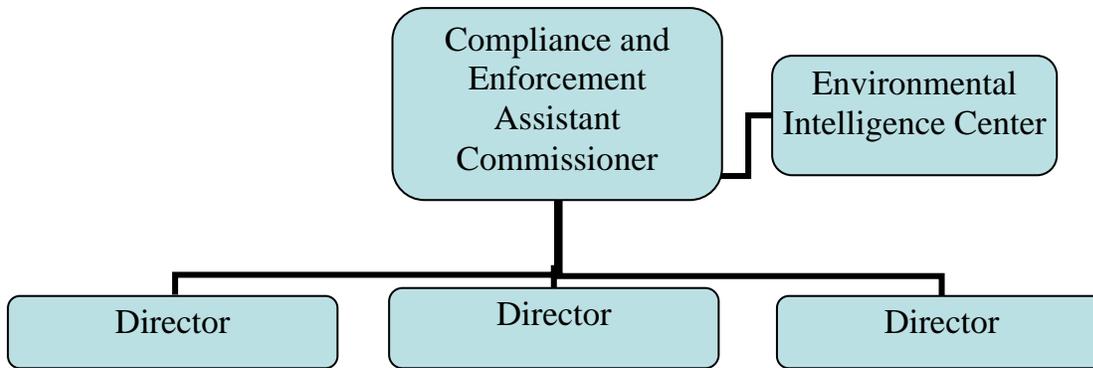


Figure 5: Representation of where the EIC will reside within the upper management chain of command

The newly created EIC will clearly need leadership. For this, it is recommended an EIC Chief be hired or recruited to serve as a manager to build and run an EIC that will serve as a cornerstone to strategic management for C&E. This individual should be a qualified and experienced analyst and have the ability to manage other analysts, duty officers and asset specialists. This manager will be responsible for overseeing the day-to-day operation of the EIC and primarily advise leaders on the implication of intelligence products to the management of the organization. The EIC Chief will work closely with the Assistant Commissioner and associated Directors and will also serve as the Strategic Manager for the organization to ensure effective communication and cascading of the SMS across program lines. It will also be the responsibility of the EIC lead to hold Management Accountability Conferences (MAC) regularly with C&E leadership, including the Assistant Commissioner and Directors. The purpose of the MACs is to ensure each and every manager across C&E is contributing to the overall SMS effort and to discuss strategic issues such as: intelligence products, scorecard updates, new initiatives, resource allocation and prioritization of intelligence requests and referrals. The EIC lead will also be a liaison to DEP-wide “goal owners”, to ensure alignment of C&E priorities with DEP wide goals.

The EIC lead will administer three separate and distinct subsidiary elements of the EIC, with each element having responsibilities and tasks contributing to the overall effectiveness of intelligence-led enforcement. These elements are:

- Watch Operations
- Analysis Element
- Asset Management

The EIC manager will actively engage these elements to ensure success of the strategic management in C&E. This manager will aid the analysis element in judging intelligence requests, to achieve relevancy and efficiency and will also serve to promote and support priorities and initiatives developed through the EIC as part of the overall SMS. Working with the asset management element will also ensure the needs of the internal and external stakeholders are identified and met.

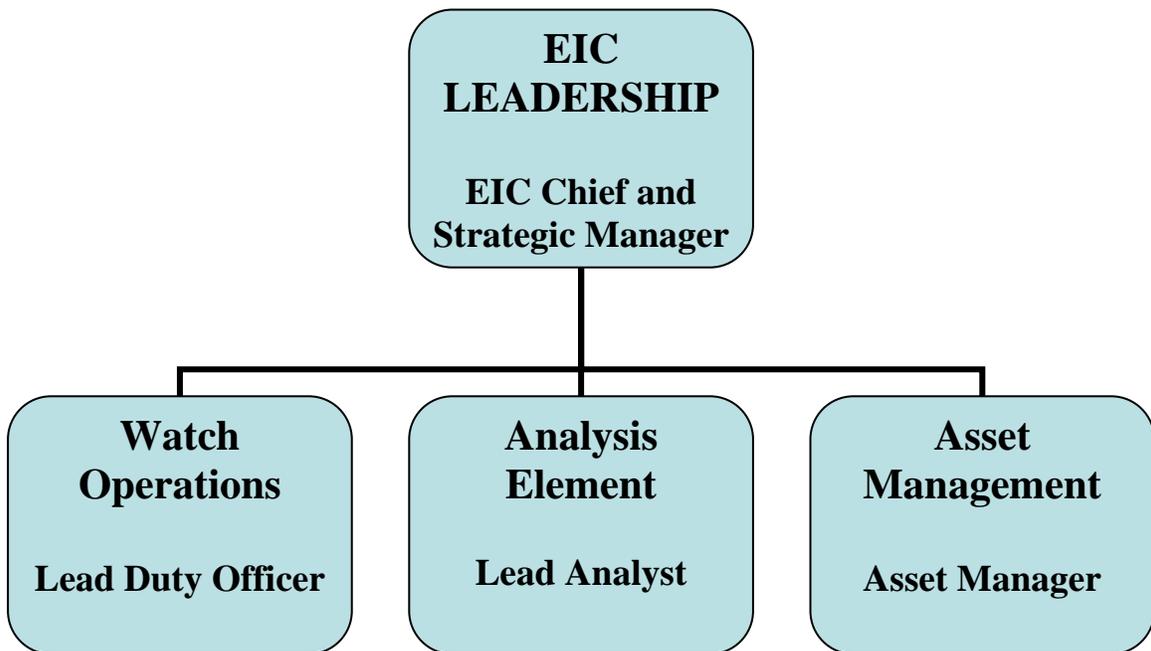


Figure 6: Proposed EIC Organizational Structure

WATCH OPERATIONS

Watch operations, will encompass the real-time situational awareness and response component of intelligence-led enforcement. The ability to respond to incident calls and emergent situations is the main focus of this element. This element would also coordinate, maintain and communicate situational awareness throughout all regions and across C&E. This element will track multiple channels of continuous input and must develop tools and products to ensure for the effective deployment of resources in the short term. It must also serve as a source of information and data to the Analysis element. For example, a high volume of complaints in the same geographic area received by Watch Operations may assist the Analysis element in developing a targeted initiative in that area of concern to address the sources of the complaints, if appropriate.

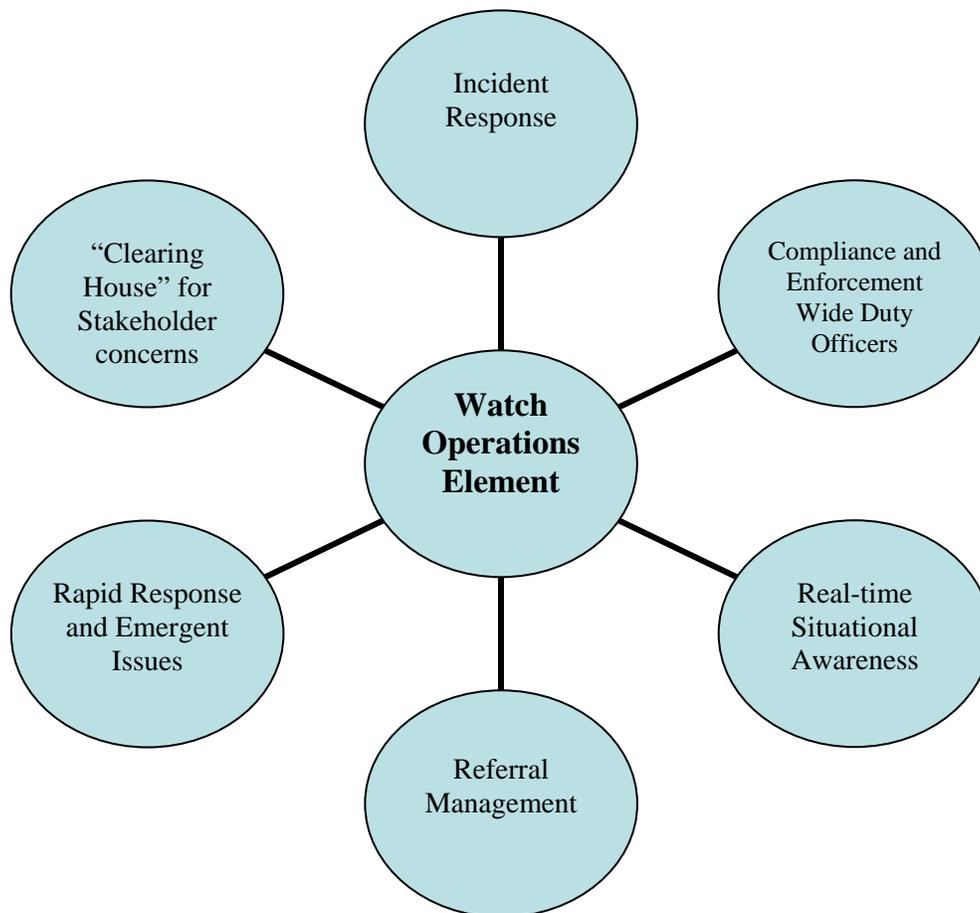


Figure 7: Main Functions of the Watch Operations Element of the EIC.

The Watch Operations element will also serve as a “clearing house” for stakeholder concerns and management referrals. In addition, awareness of Open Public Records Act (OPRA) requests can be used as an early warning system for possible forthcoming environmental issues or concerns. The element will have the ability to identify and ensure responsiveness to issues portrayed in the media, through attentiveness to press clips and other media avenues. Phone calls and emails from customers, including the regulated community, stakeholders and citizens will be filtered through watch operations to allow for a consistent, appropriate and efficient response. The current incident system will be monitored consistently and effectively. Overall surveillance of DEP incident and complaint system to identify issues, both emergent and non-emergent, will necessitate a response through C&E. Relevant concerns will be filtered and disseminated to the appropriate program for response. This element must have a multi-media approach but also embrace program specific expertise and experience as restrictive issues arise.

One of the main functions of Watch Operations will be to streamline the current “Duty Officer” role, whereby numerous inspectors from each media and region are assigned on a daily basis to address the general public or regulated community’s concerns. This process will be replaced by a centralized, more efficient, customer-focused process that is less resource intensive. As a result, several inspectors, currently serving as Duty Officers will become available to perform other critical functions within C&E.

During the onset of the EIC, it is recommended a Lead Duty Officer be appointed from within C&E. The lead duty officer requires field supervisory experience, especially in managing staff response to emergent situations and incident calls. The lead duty officer will run the Watch Operations element to the EIC, and will maintain and communicate situational awareness for the entire organization.

ANALYSIS ELEMENT

The Analysis element will house analysts who have the capabilities to translate raw data into useable and relevant intelligence products. Analysts will be able to judge initial

request and data relevancy and value and have the confidence and expertise to deny requests, when appropriate. This program will be the driving force behind supporting C&E's strategic needs and will have the expertise to ensure that long term outcome goals and priorities are planned for and accomplished.

Data, both existing and forthcoming from individual inspector input, will be evaluated for relevancy and necessity, analyzed and turned into useable and standardized intelligence. This program will have the capability to generate quickly and efficiently multiple types and formats of intelligence products, either through requests or as a precursor to targeted intelligence-led enforcement. Communication and coordination of the intelligence products created by the Analysis element, through management briefings, will be crucial to the overall success of the EIC.

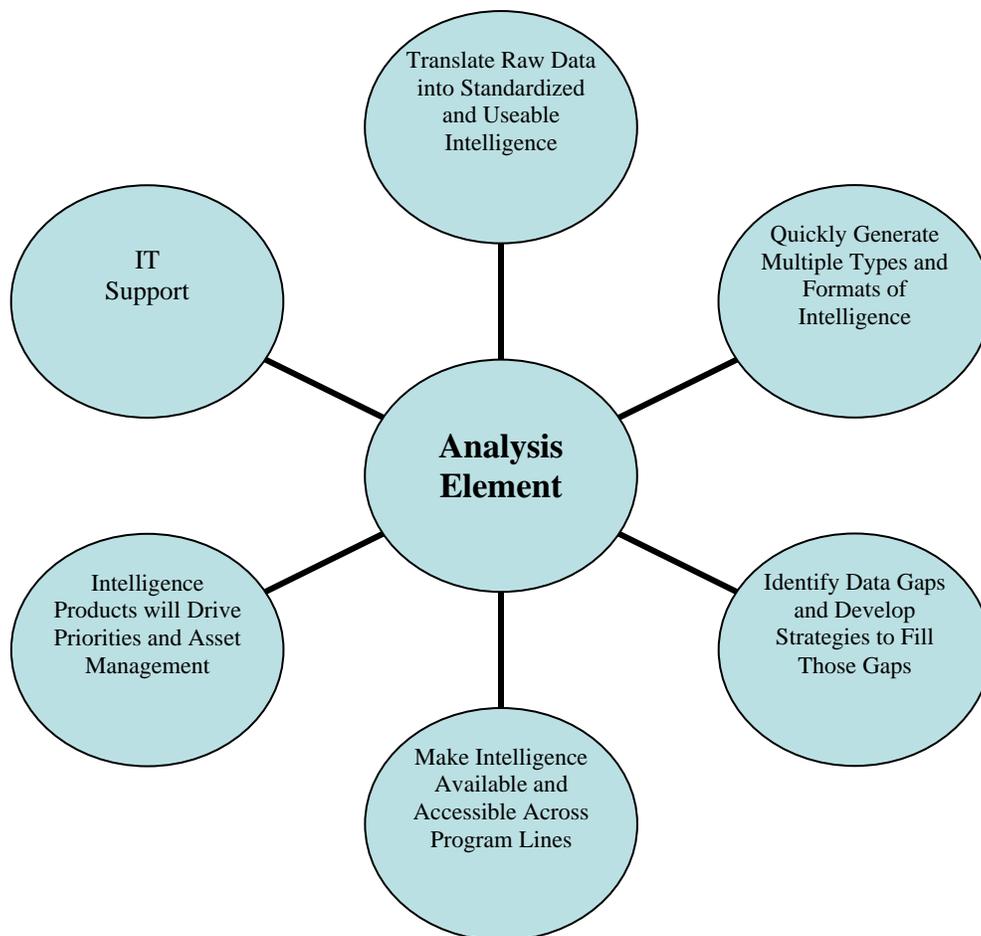


Figure 8: Main Functions of the Analysis Element of the EIC

Forthright data inputs can include but will not be limited to hotline notifications, inspector input, bankruptcy notices, changes of permit status and information from the media. Statewide databases like ambient air quality, water monitoring, cumulative impacts and environmental trends will be evaluated, mapped and prioritized. Identification of data gaps is paramount.

The Analysis element will be capable of managing intelligence requirements and collection processes. It will also provide support to all intelligence-related functions within C&E. It should identify information and data gaps and develop strategies to fill these gaps and make intelligence available across program lines. The Analysis element will develop information sharing protocols both within C&E and across DEP programs. Strategic analysis and development of intelligence products must drive and support a wide range of initiatives, drive the allocation of resources and the development of investigative and intelligence strategies to support C&E's mission.

As noted earlier, programmers in the Analysis element will assist with intelligence technology and ensure the technical needs of the element are met and up to date, as well as effective.

It is highly recommended that a Lead Analyst position is created and an individual is either hired or recruited from inside or outside DEP. To support the lead analyst and further the efforts of the Analysis element, it is also recommended that three additional positions be created and funded: a support analyst, a technology specialist and a technical report writer. These individuals should have a strong IT background, be familiar and capable of complex debugging and advanced Business Intelligence software operations and formatting.

If the Lead Analyst is hired or recruited from another agency it is recommended the individual be a certified analyst. If the option to laterally transfer or promote to these analyst positions from within is chosen, certification avenues should be explored. Creation of an intelligence training program within C&E or in partnership with a State

university, leading to the development of an Intelligence Officer Certification program also presents opportunity.

ASSET MANAGEMENT

This element will be charged with the overall development, tracking and constant evaluation of the C&E wide work plan. Evaluation of mandates, statutes and regulations will be necessary in order to ensure that every effort and priority of C&E is developed strategically, with the environmental needs of the citizens of New Jersey as the driving factor. C&E must have the ability and support to do the “right things”, and have the resources available to achieve goals and ensure broad environmental benefit. Communication lines will have to be established and maintained with the US Environmental Protection Agency to ensure C&E is operating consistent with their plans and priorities. Resource allocation and organizational capacity will be managed through this element, and resources will be leveraged to achieve common goals.

Where situational awareness and emergent response will be managed through the Watch Operations element, the identification of medium to long term priorities and initiatives will be developed through the Asset Management component of the EIC.

This element will also house the outreach coordination component. Relationships will be identified and maintained through communication of initiatives, priorities, needs of the organization and results. Pro-active partnerships critical to C&E’s mission, goals and objectives will expedite intelligence exchange. This element will explore two-way collaboration, job sharing and delegation opportunities to reduce C&E’s workload and improve overall efficiency. A communication strategy that includes crafting messages, campaigns, internal and external web-content, advisories and the final production of the annual C&E highlights report will also be managed through the outreach component.

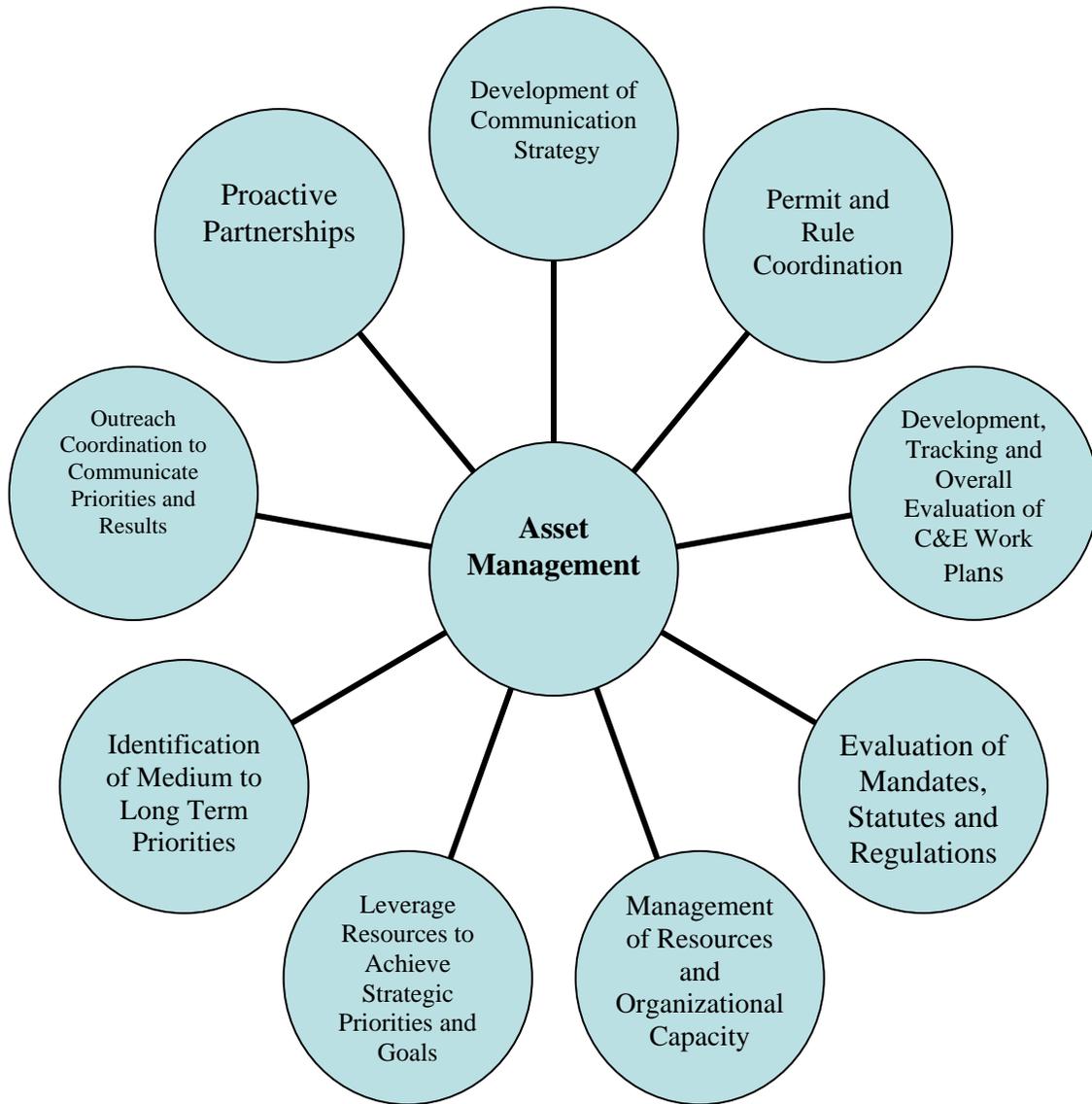


Figure 9: Main Functions of the Asset Management Element of the EIC

This component will be the avenue for C&E rule coordination with priority agencies as well as permit coordination efforts. Outreach coordination will ensure effective participation in the Department’s planning, policy making, rule making, permitting and decision making processes. Overall communication between C&E and other DEP programs will improve.

To manage the functions of the Asset Management element, it is highly recommended that an Asset Manager position be created and funded. In addition, to accomplish effective outreach coordination, it is recommended a Communications Lead be procured.

The establishment of the three aforementioned elements will ensure success of the EIC, especially early on, when it will face the most challenges. In addition to the previous six (6) positions identified earlier to staff the EIC, it is highly recommended, that an additional staffing of five (5) positions be added. These five positions will serve either as duty officers, supporting analysts, program liaisons or general support staff. It is understood that as time progresses, additional staffing needs may become more evident.

The SMS team recognizes that this is a very ambitious proposal, and that it will take significant effort to fully implement. However, establishment of the EIC will provide for the centralized management and C&E-wide execution of integrated intelligence and enforcement operations, an independent data collection and management process, and a dedicated strategic analysis effort. Establishment of the EIC would also allow C&E to create a strong organizational entity, dedicated to intelligence sharing within and outside of C&E, and create opportunities for DEP-wide intelligence activities. It would also allow C&E and the DEP to expand career paths into an environmental intelligence career service. This may require new flexibility related to our ability to hire, promote, and reward intelligence personnel.

Support from all levels of C&E is crucial. It is imperative that C&E leadership support the establishment and operation of the EIC. Funding support for staff, equipment upgrades, training for EIC analysts and operators, as well as general training for all C&E staff is a necessity. Leadership must develop the appropriate guidance and priorities for the EIC to allow for appropriate intelligence collection and operational focus.

Inspectors should continue to collect all information gathered as part of the day-to-day field assignments, as prioritized through the EIC, and input this data and information into NJEMS. It is recommended that the EIC establish data entry standards, which is to be followed by all inspectors, to assure the relevancy and usefulness of inputs. They should also expand their purview to identify and record additional, relevant data and information from the surrounding environment during the course of the usual field inspections. Inspectors are encouraged to conduct additional research and outreach to fellow inspectors to acquire information required for processing intelligence products by the EIC. It is crucial to engage with intelligence agents and analysts regularly when requesting appropriate intelligence support for ongoing investigations, upcoming inspections, while also providing evaluations and relevant feedback of the products. Inspectors will work closely with staff from the Asset Management element to establish partnerships with local regulatory agencies such as: Police and Fire Departments, local code officials, Health Departments, county/township hazmat teams, and Environmental Commissions to expedite information exchange and provide additional input to the EIC.

The following list is provided as the SMS team's recommended initial assignments to set the EIC in motion with strategic accountability:

- Be an asset and provide strong guidance and assistance to C&E management with cascading of the Tier 2 and 3 Scorecards and development of strategic work plans.
- Perform an assessment of current work plans and their relation to mandates, regulations and statutes. Work with management to use this assessment to generate program specific work plans that are both relevant and effective while ensuring no backsliding or loss of funding.
- Research the science and history behind successful organizational structure to make recommendations on C&E functions that no longer align with C&E strategic goals and objectives
- Develop and recommend new functions, as needed, for expanding C&E's capabilities beyond enforcement

3. Restructuring and Alignment of C&E Staff through an Ecological and Holistic Approach

The SMS team recommends that C&E's organizational structure be reorganized and aligned to support the new strategic focus dictated by the SMS, its goals and objectives. This restructuring will further the effort to reduce silos and embrace a geographic-based, enviro-shed type and more holistic approach.

This recommendation refers to creating a strong, place-based perspective on environmental problems and their solutions. This implies that staff are assigned, allocated and managed within discretely focused and ideally eco-defined physical boundaries. Figure 9 shows DEP's existing watershed boundaries, which could be used as geographic "*enviro-sheds*" for the purpose of geographic regionalization within C&E. The concept also implies reduction or elimination of artificial bureaucratic or regulatory boundaries as currently exist in distinctions between programs (Air, Water, RCRA, etc.) often referred to as operational "silos". The anticipated benefit is for individuals and teams to work together building familiarity with interrelated pollutant sources, ecosystems, citizens and groups.

The SMS team views this reorganization as a strong strategy to achieve C&E strategic objectives. However, the team suggests a possible pause or delay towards full-scale implementation. A gradual approach allows for: resolving many current unknowns in execution of this regionalization; time to adopt, refine and improve fluency in strategic management; and time to build capacity of the EIC.

As a first step, the team recommends the appointment of regional managers to oversee each C&E region under the new alignment paradigm. However, as stated above, any restructuring must be methodic and carefully planned with management. The team also recommends launching this reorganization realignment starting with the Barnegat watershed.

Additional options are discussed below, and can be implemented concurrently or independent of one another. Progress and effectiveness, or lack thereof, shortfalls and challenges can be analyzed by subsequent teams chartered to tackle the next key systems of work, notably the inspection, investigation and enforcement systems. Cultivation of the EIC will also serve as an avenue to evaluate the overall effectiveness of the chosen options as noted below.

Restructuring and Realignment Using “Enviro-Sheds”

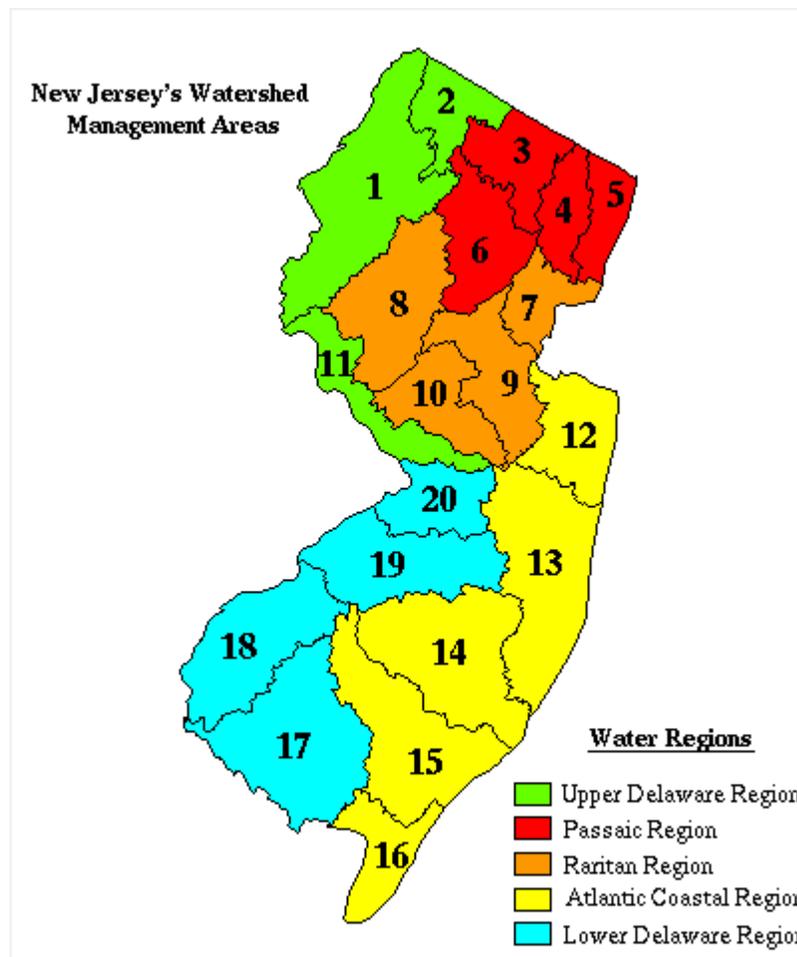


Figure 10: Current water-shed delineation as per the State of New Jersey; USGS model;
http://nj.usgs.gov/qw/sw_qw/cov/imf/h2o.gif

Barnegat Watershed / Enviro-shed

It is recommended that C&E devote a regional team, divided by way of a Hydrological Unit Code (HUC) approach, dedicated to advancing the DEP level goal. C&E will formalize its involvement into a discreet project that will also serve as a pilot for regionalization. The Barnegat “enviro-shed” (shed) would be approached as a regional overall target to pursue broad environmental improvements. As the Barnegat approach continues without the EIC initially, a team of field staff comprised of program specific expertise dictated by the environmental issues facing the shed would be cultivated. A supervisor would then be appointed to this team by management, and together, this team would “own” the shed. Many options are available concerning staffing levels above supervisor, and it is the recommendation of the SMS team that management determine the best viable organization of such. Management also has the option to appoint a lead inspector to further facilitate the team approach.

The first responsibility of this newly created team would be to assess the mandated inspections within the shed, and develop a shed wide work-plan to ensure mandates, statutes and regulations, until they are evaluated for relevancy by the EIC, are pursued.

Especially in this particular shed this team could comprise field staff that is already assigned to specific facilities within the shed. This would allow for some carry over of facility specific expertise. Management should ensure the supervisor has the resources needed to complete all necessary mandated inspections as well as leave a significant amount of time for the finding and fixing problems aspect of environmental protection. The remaining work-load duties originally realized by this newly formed team would be disseminated to remaining field staff that would be regionally re-assigned out of this particular shed to ensure ownership. Field staff would be conducting mandated inspections with the end goals in mind, thinking outside of the box, and working towards improving the shed’s environmental health.

This resultant team would give the supervisor direct control and ownership of the shed. This team should meet weekly to discuss, among other things, emergent issues, minor

concerns, mandated inspection requirements to look for overlap and ensure efficiency, and to assess the overall condition of their shed. These discussions would allow for businesses and facilities to be inspected less frequently, initially with more than one field staff member, to improve efficiency and begin inspector to inspector training. For example, while the average water inspector could not conduct a complicated air inspection with confidence, front line training will allow for the less complex type of inspection to be addressed by a broader range of staff. A water inspector may in time develop almost an equivalent of an air discipline minor. Field staff would be able to use program specific expertise and resources while embracing a multi-media approach.

Staff would ultimately become more attentive to their particular shed, establishing partnerships, understanding the players and understanding the broad outcome goals. Management through asset management and resource allotment would ensure field staff has more time to patrol, both the regulated and non-regulated community, which would aid in deterrence. The supervisor would have direction over this team of field staff, which would allow for goals and targets to be prioritized, and communication to be stream-lined.

Communication is paramount. The general public must understand exactly what it is staff is looking for and there must be clear reporting avenues established. The general public knows what police are looking for, and who to call. Why should they not have that general understanding when dealing with environmental issues? Staff is to engage the general public often and consistently. Attendance at relevant off-site, off-hour meetings including those by stakeholders, township officials and environmental commissions should be the standard rather than the exception. This approach can be facilitated through management, the regional supervisor and the lead inspector.

Communication across previously compartmentalized programs would also be stream-lined. This team would be expected to engage each other consistently, to discuss and resolve issues, concerns and emergent issues and to ensure the priorities of the supervisor and management are pursued. Early onset frontline training through multi-

media mandated inspections would move towards a more holistic inspection approach when dealing with the regulated facilities. Deterrence would increase if facilities saw an increase in inspections from varied programs focused on one or two major issues. For example, a hazardous waste inspector could investigate a major sewage treatment plant very quickly to assess the quality of the effluent, and could relay that data to the water inspector.

This team would be tasked with mining and standardizing all available data to be utilized early on, initially without the aid and outputs from the EIC. Cumulative impact assessments and incident trends are two examples this team could use initially for targeting. Data entry standards should begin to be a focus, as once the EIC is established data inputs will need to be effective and relevant. Once established the EIC will simplify the data issues and concerns faced early on by this team. This Barnegat approach would quickly show transition, and would give the investigation, inspection and enforcement teams, when formed, a starting point for discussion.

Additional Potential Enviro-Shed Projects

Another option is to roll out additional enviro-shed projects throughout the State. These projects can be rolled out with similar teams formed in the Northern or Southern region, or both, or the Barnegat shed could be the main focus of the early transformation implementation. Existing data, including cumulative impact assessments and ambient air and water quality reports and trends can be utilized to prioritize one or more targets or sheds within the State. This shed team approach could be an option to tackle the shed corresponding with the above noted target or targets, realized via current data trends.

To reiterate, it is the vision of the SMS team that eventually, in time and if feasible, this approach be expanded to include all enviro-sheds throughout the State. This approach would allow for a holistic, efficient and consistent approach to environmental protection which would improve overall communication and deterrence.

4. Prioritization of the Key Systems of Work

In February 2011, the C&E's Transformation Steering Group developed and ranked C&E's key systems of work, and Table 2 shows the ranking results. The SMS team has re-evaluated the key systems of work as identified by the Steering Group within the framework of the proposed *Balanced Scorecard* and C&E's new Goals and Objectives. New systems and rankings are shown in Table 3.

Key Systems February 2011

1	Strategic Management system (targeting, ensuring deterrence, prioritization, workplans, consistency, measuring and communicating success)
2	Education system (training sessions, on-site assistance, guides and materials online)
3	DEP Strategic Management System (aligning all areas with mission, DEP-wide prioritization, re-allocating resources, ensuring communication and collaboration)
4	Investigation/Problem ID system (managing and responding to complaints and referrals, community input, observation, research & analysis, DEP science input)
5	Inspection system (prep, on-site, interview, compliance and stewardship, report, news)
6	Information system for behavior change (devising collection or development of new information, building reports or materials for direct or third party influence)
7	Enforcement system (follow-ups, penalties, case management, settlement, ADR, "conversions" of bad guys to good guys, SEPs)
8	Self-reporting system (self-cert, disclosure, monitoring, audit schemes, etc.)
9	Bulk Processing (licensing, fees, billing and collections)

Table 2: Key Systems of Work and Rankings Developed by C&E's Transformation Steering Group in February 2011. Gray shading depicts a new identified system, while green shading depicts a system C&E has minimal influence

As can be seen, three new systems were identified and one system, specifically the self-reporting system (#8 on Table 2), was deemed not to be a priority at this time.

Key Systems July 2011

1	Investigation/Problem ID system (managing and responding to complaints and referrals, community input, observation, research & analysis, DEP science input)
2	Inspection system (prep, on-site, interview, compliance and stewardship, report, news)
3	Internal training encompassing the <i>Balanced Scorecard</i> , Strategic Management and the Strategic Plan
4	Asset Management to manage resources and maintain organizational capacity
5	Education system (training sessions, on-site assistance, guides and materials online)
6	Enforcement system (follow-ups, penalties, case management, settlement, ADR, "conversions" of bad guys to good guys, SEPs)
7	Information system for behavior change (devising collection or development of new information, building reports or materials for direct or third party influence)
8	Analysis management to make intelligence available and accessible across program lines
9	Bulk Processing (licensing, fees, billing and collections)

Table 3 : Key Systems of Work and Rankings Developed by the SMS team in July 2011. Gray shading depicts a new identified systems, pink shading depicts new systems identified by the SMS team, while green shading depicts a system C&E has minimal influence

As noted, it was reaffirmed that it is a priority to initiate an evaluation of the current inspection and/or investigation systems immediately. In order to ensure an inspection/investigation system that allows for an efficient and holistic approach, the current system must be re-evaluated and molded to fit within the Goals and Objectives of C&E updated Strategic Plan. It is paramount to allow staff to find and fix relevant environmental problems, which is not possible under the current Inspection System framework. In addition, regionalization, as described above, will not be as effective as it could be if operating under the current inspection system.

A total of five (5) goals were identified through the strategic management process as the motivating force to maintain an effective Compliance and Enforcement program. Goal

one, referencing building and maintaining organizational excellence, is to be achieved through effective cascading and implementation of an effective Strategic Management System. The subsequent goals as noted in the attached Strategic Plan are feasible with establishment of an operational centralized EIC. However, identifying the data trends, producing the intelligence products and managing resources are only attainable through a well adapted inspection/investigation system.

It is highly recommended that a team be established to engage in the inspection and or investigation process. This team can ensure Strategic Management is continued and the goals and objectives of the Strategic Plan are prioritized. Processing the data and producing intelligence is only functional if the information is used effectively and efficiently.

The additional systems of work cannot be understated. The internal training system will be utilized to cascade the *Balanced Scorecard* and ensure understanding and appreciation throughout C&E. The SMS team has already engaged in a culture change, which was essential to fully understand strategic management. Ensuring upon roll-out that operating strategically is fully understood is paramount to make certain that the current *Balanced Scorecard* and Strategic Plan are valued. Effective training will ensure more well informed input and proposals associated with the Strategic Plan from staff at all levels, and the understanding of the steps taken to fully engage in strategic management and draft a Strategic Plan, will be grasped.

The asset management system of work was identified as the development of the EIC took shape. Resource allotment and management coupled with maintaining organizational capacity is essential to ensuring the right amount of staff is in the right place to tackle the highest priorities. Customer training through the education system will ensure the overall understanding by the customer on what it is C&E does, and what exactly C&E expects.

The enforcement system, including Supplemental Environmental Project (SEP), will ensure relevancy, fairness and consistency of enforcement actions. A SEP project is already in motion and will be essential to foster economic growth and ensure environmental improvements.

The information for behavior change system will help to facilitate overall improvement to the environmental approach of the customer and regulated community. The analysis system emerged, again, as the EIC development plans took place. Analysis will allow for staff at all levels to do the right things. It will make intelligence accessible and available across program lines.

The systems for bulk processing (licensing, fees, billing and collection) deserve more honest and open discussion about their appropriate place in the organization. The team has stopped short of recommending any changes or immediate action, but it seems clear that these systems will likely continue to come out as a low priority within a results driven organization defined by the results of high and meaningful compliance, behavior change and finding and fixing environmental problems. It is possible the team has missed opportunities within the *Balanced Scorecard* approach to apply the financial perspective to create more focus or attention to these systems in such an effort. Here is where professional assistance in applying BSC may lend greater insight.

it is also clear more discussion should occur with a more complete view on how the DEP as a whole is organized and why. Transformation with its mandate for more collaboration across the DEP should provide some opportunity. Some of the current bulk processing systems seem to live within C&E out of a concern that others might not provide the appropriate level of attention, care or oversight. Other concerns are about the supply of data to C&E, or the need to integrate various approvals closely with their enforcement. But the logical extension of all these arguments would end with C&E ultimately assuming nearly every function and system in the entire DEP. It is possible some of this dynamic was at work when the latest of the bulk systems was adopted by C&E in order to leveraging the bulk systems already located there. The best

arrangement, well analyzed, researched and logically supported should ultimately be devised in the context of the DEP's full transformation efforts.

B. Proposed Implementation Phases

It is the recommendation of the SMS team that certain aspects of the aforementioned recommendations are implemented concurrently, in phases, as described below.

Phase One

In order for staff and management at all levels within C&E to fully understand and appreciate Strategic Management, relevant and efficient training must take place immediately. This training should begin with upper management including the Directors. This training, as noted above, can comprise of hiring a professional *Balanced Scorecard* training team, or generating, through training, a *Balanced Scorecard* professional from within our organization. If the latter option is pursued, the training for the in-house professional must take place first.

Ownership of Strategic Management must be defined as soon as possible. It is the recommendation until Strategic Management has momentum, the Steering Group and SMS team coordinate the *Balanced Scorecard* and the Strategic Plan to ensure the bridge from development to implementation is realized.

Establishment of an enviro-shed team to begin with assisting the Department in pursuing success concerning the high level goal associated with improving the Barnegat Bay. This is already in motion, and this initiative should be tailored and molded as noted within this report to fit within Strategic Management and geographic regionalization.

Phase Two

Postings for promotional opportunity, new hires and/or lateral mobility is to begin once training has commenced, and at least Directors and upper management have an

improved understanding of Strategic Management as developed by the steering group and the SMS team.

Concurrently with the postings and following the initial training roll out, training should continue to include staff at all levels. The training regiment as realized by upper management can be refined, enhanced and tailored to meet the needs of individual levels of staff to ensure efficient understanding of Strategic Management. It is the understanding of the SMS team that communication and training initiatives will be consistent to ensure effective implementation of Strategic Management.

Phase Three

Cascading of the Tier 1 *Balanced Scorecard* and Strategic Plan into the Tier 2 *BSC* is to take place after roll-out of a successful training program to ensure a better understanding of Strategic Management at all levels. Individual Bureaus will be tasked with developing their own *Balanced Scorecard*, with goals, objectives, measures, initiatives and targets that are aligned with the C&E Strategic Plan. The team recommends firm and aggressive deadlines for development of lower tier *Balanced Scorecards*.

The newly formed EIC should encompass its initial staffing, and if not continuation of such should continue. If initial staffing is complete, overall and tailored training of EIC is to commence. Each individual EIC staff member should be trained in the overall aspects of the *Balanced Scorecard*, Strategic Management and the Strategic Plan. Tailored training to ensure effectiveness throughout EIC staff and their coinciding roles is also to commence.

Phase Four

Early onset initiatives and responsibilities of the EIC are to be established. It is a recommendation to ensure that the EIC assesses all relevant mandates, statutes and regulations to determine reasoning behind the current work plans and to offer alternatives to ensure development of a C&E wide work plan that allows staff to do the

right things and to do things right. This importance and difficulty of this responsibility cannot be understated. The EIC will have to engage all programs, while maintaining an open line of communication with the EPA to ensure their concerns are taken into account and met.

The EIC should also be tasked to research the science and history for successful organizational structure. Determining which programs are relevant within C&E and to make recommendations regarding any inconsistencies noted. The EIC should also begin to develop programs like Stewardship and SEPs to expand C&E's activities beyond enforcement to begin to cultivate and foster sustainability. The EIC should begin to develop the definition of meaningful compliance, to aid the inspection, investigation and enforcement system teams, when formed, in the establishment of relevant, consistent and fair enforcement, which supports staff discretion. The EIC should also evaluate budgets to ensure the optimal allocation of resources.

PART THREE

CONCLUSION AND ANTICIPATED CONCERNS

Intelligence-led enforcement and operating strategically will necessitate the understanding, anticipation and strategic response to future changes. Being aware of the overall malleability of this proposal will allow for consideration of relevant input upon roll-out and in its inception, and will also allow for revisions as targets and initiatives evolve and priorities are met and/or restructured. Expectations need to be adjusted throughout the process. It will be important for upper management to disseminate initially what recommendations and initiatives have room for discussion and which do not. Resistance is to be anticipated, and management should clarify what exactly is moving forward without debate.

Operation of intelligence-led enforcement within the framework of a Strategic Management System will allow for C&E to do the right things, prioritizing the big picture and taking into account state and DEP goals. The SMS will allow for C&E to do things right, to operate efficiently, effectively and operate within customer-focused processes. Metrics will be utilized to align resources with priorities, drive decisions, measure results and provide opportunities for accountability and transparency. The implemented SMS will be flexible to support new initiatives and emerging issues that enable C&E to respond to issues quickly, effectively and consistently while ensuring enforcement relevancy. Decisions and priorities will be science based, utilizing data, research and analysis. Intelligence-led enforcement will allow C&E to be dedicated to receiving and analyzing data, intelligence and input, and will allow for effective dissemination of analysis to staff and partners.

Overall C&E will have the resources and support necessary to achieve high but meaningful compliance, to receive better behavior from others resulting in better environmental protection or outcomes whether mandated or not, to find, clarify and fix environmental problems as directly as possible and to maintain deterrence while ensuring no backsliding on past environmental gains.

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APPENDIX A

Team Charter

**Compliance & Enforcement
Strategic Management System Charter (SMS)
March 24, 2011**

Sponsor: Assistance Commissioner Wolf Skacel

Purpose: This system will allow us to set and adjust priorities and allocate resources to achieve the best environmental outcome and benefit. These goals will be accomplished while ensuring deterrence, high but meaningful compliance, better behavior from others, finding and fixing problems, developing consistent goals and communicating results. This system must recognize and be prepared to counter objections over breaking convention that could be seen as undermining laws or creating an uneven playing field. The system should allow for holistic and multi-media approaches. It needs to acknowledge mandates and regulations but also seek creative ways to satisfy these obligations and/or pursue appropriate modifications.

Scope:

- Think long term and short term
- Do not let laws, regulations, EPA mandates be a constraint at this stage; however, think of creative ways to account for mandates.
- Consult with outside/inside experts, with Sponsor's prior approval

Team Members:

Steve Anderson – Climate and Env. Management- Climate & Energy/Trenton

Randy Bearce – C&E/Land Use/Trenton

Sharon Davis – Climate and Env. Management- Air Planning/Trenton

Bill Everett – C&E - Solid Waste/Trenton

Sonya Kopp – C&E - UST/Trenton

Michael Mariano – C&E - Hazardous Waste/North

Jeff Meyer – C&E - Air/North

John Orrok – C&E - Pesticides/Trenton

Richelle Wormley – C&E - Air/South

Art Zanfini – C&E - Water/North

Resources:

- Up to one day per week will be allowed for SMS-related activities.

Due Dates:

- White Paper due on June 1, 2011
- Final report including recommendations due on August 1, 2011

Current Situation that demands a Strategic Management System:

- Siloed/compartmentalized
- Focus on unimportant things

- Not driven by environmental problems
- Deferring to national priorities
- Limited targeting
- Not using data fully
- Inconsistency in our goals
- Doing too much poorly (lack of priorities)
- Too much process/too little time
- Limited resources/time
- Inability to change/No methods
- No broadcast/communication of efforts/success
- Complexity of regulations

Desired Outcomes:

- Environmental protection & Improvement
- Supported (science)/defensible strategies and priorities
- Goal-driven resource management
- Measures- Clear performance measurement
- Flexibility
- Consistency in our goals
- Ability to be proactive/anticipate problems (find and solve problems)
- Better coordination with DEP plans/goals/priorities
- Timeliness & efficiency
- Responsiveness
- Compliance & beyond

Undesired Outcomes:

- Backsliding
- Too many measures
- Creating more bureaucracy
- Overcomplicating
- Additive effect (it should just replace/improve)
- Inflexibility
- Lacking credibility
- Loss of momentum
- Resulting in quantity over quality
- Undesirable legislative mandates
- Minutiae
- Losing funding
- Not gaining buy-in from our counterparts

APPENDIX B

Compliance and Enforcement Strategic Management Plan

New Jersey Department of Environmental Protection

Compliance & Enforcement Strategic Management Plan

2011

Office of the Assistant Commissioner
Wolf Skacel, Assistant Commissioner

Vision Statement

We are building a nationally recognized organization that empowers our trained and dedicated professionals to ensure New Jersey's businesses, communities and individuals are models of environmental stewardship and compliance.

Values Statement

The following values will be demonstrated through our business operations:

Integrity - Compliance and Enforcement (C&E) is committed to performing all of its duties in a manner exemplifying the highest standards of professional, moral and ethical behavior.

Environmental Dedication - C&E is dedicated in its efforts to preserve, protect, and sustain the environment of New Jersey for the residents of the state and future generations.

Responsiveness and Effectiveness - C&E will strive to be responsive to the issues influencing our environment and to the needs of the constituents we serve. All of our actions will focus on improving the effectiveness of our program through self-evaluation and a commitment to achieve excellence in our daily operations.

Clarity of Communication and Accountability - C&E will continually strive to improve our relationship with all of our stakeholders by expanding our outreach to the various constituents we effect, providing clear purpose and goals, and sharing the results of our program's performance.

Continual Improvement and Innovation - C&E will work towards continuous improvement of the operations within our program, and will seek and encourage the use of innovative methods to achieve excellence in the pursuit of our environmental goals.

Fair and Just - C&E will perform its duties in a manner that is equitable, fair and just to all of the constituents we serve.

Mission Statement

We are dedicated to ensure that New Jersey's environment is clean, safe, enjoyable, preserved and enhanced for future generations.

Results to be Delivered

- High but meaningful compliance
- Better behavior from others resulting in better environmental protection or outcomes, whether mandated or not
- Finding, clarifying and fixing environmental problems as directly as possible
- Maintain deterrence and no backsliding on past environmental gains

Goal 1

Build and maintain organizational excellence

Objective 1.1 Create and integrate a strategic management system (SMS) into day-to-day operations

Strategies

- 1.1.1 Develop clear connection to goals and objectives for every function, role and project
 - 1.1.2 Align resources with C&E's vision and goals and cascade goals, strategies and initiatives to every level of the organization
 - 1.1.3 Evaluate any key systems of work that are impacted by the SMS
-

Objective 1.2 Ensure that management and staff function as a team to pursue C&E's goals and objectives

Strategies

- 1.2.1 Hold effective and regular meetings focused on goals and objectives, not limited by organizational structure

Initiatives

- 1.2.1.1 Develop enhanced meeting support structure
 - 1.2.2 Create targets and hold each unit accountable for accomplishing targets
-

Objective 1.3 Ensure staff at all levels understands the strategic management system and are supported in new and modified roles

Strategies

- 1.3.1 Develop training curriculum appropriate for the new paradigm
-

Objective 1.4 Engage employees at all levels by finding the best alignment between staff's skills and the needs of the organization

Objective 1.5 Ensure appropriate and stable fees and funding

Strategies

1.5.1 Develop a performance budget that ensures appropriate and strategic funding for C&E

Goal 2

Collaborate with partners critical to C&E's mission, goals and objectives

Objective 2.1 Align C&E's objectives and initiatives with DEP's overall priorities

Strategies

2.1.1 Ensure effective participation in the Department's planning, policy-making, rule-making, permitting and decision-making processes

Objective 2.2 Improve communication between C&E and other DEP programs

Strategies

2.2.1 Present our priorities, successes, and intentions to all C&E and our partners at least quarterly

2.2.2 Produce a monthly summary of findings/outcomes for the benefit of all of C&E and our partners

Objective 2.3 Explore and pursue two-way collaboration, job sharing and delegation opportunities with our internal and external partners to reduce C&E workload, and improve efficiency

Strategies

2.3.1 Ensure effective implementation of the Asset Management element

Goal 3

Use science and data analysis to determine priorities and measure progress in achieving meaningful environmental health and safety objectives

Objective 3.1 Create and deploy an intelligence-led enforcement system that allows C&E to identify and focus on priorities and finding and fixing environmental problems

Strategies

3.1.1 Define and staff new roles to be supported and trained in the analysis functions of intelligence-led environmental protection

Objective 3.2 Identify functions that no longer align with C&E's goals and objectives

Strategies

3.2.1 Evaluate all mandates, analyze their environmental benefit and present alternatives to stakeholder

Objective 3.3 Adopt the NJDEP's Cumulative Impacts model and use it to drive geographic targeting for multi-media enforcement activities.

Strategies

3.1.1 Reduce the incidence or potential of harmful cumulative impacts.

Goal 4

Achieve high and meaningful compliance and foster sustainability

Objective 4.1 Conduct relevant, consistent, and fair enforcement while maintaining deterrence and ensuring no backsliding

Strategies

4.1.1 Expand the current inspection paradigm to embrace a multi-media approach

4.1.2 Shorten checklists by adopting a generalist approach to inspections (Wolf's 1-hour inspection)

Objective 4.2 Expand capabilities beyond enforcement to achieve environmental results

Strategies

4.2.1 Expand and improve the stewardship program

4.2.2 Expand and improve compliance assistance & education

4.2.3 Translate penalties into environmental improvements with Supplemental Environmental Projects (SEPs)

4.2.4 Develop information tools that create incentives/disincentives for behavior change

Objective 4.3 Ensure processes address the needs of the regulated community, our stakeholders and the general public

Strategies

4.3.1 Regularly seek input and information directly from stakeholders.

4.3.2 Improve key systems of work to focus on the customers

Objective 4.4 Find and fix problems

Strategies

4.4.1 Develop guidance to implement a responsive approach to enable staff to identify, appropriately address and resolve problems

Goal 5

Communicate effectively to ensure transparency and accountability

Objective 5.1 Ensure all partners and stakeholders understand the SMS, its goals and objectives

Strategies

5.1.1 Update and improve internet resources to facilitate information exchange

5.1.2 Develop internal advisories to timely inform staff of emergent issues

Objective 5.2 Develop effective ways to clearly and timely communicate C&E actions, measures and results

Strategies

5.2.1 Develop measures of success that can clearly demonstrate progress towards achieving goals

5.2.2 Develop a report card and other initiatives to broadcast our successes and continuous improvement actions

5.2.3 Communicate any failures or shortcomings in a timely fashion to allow us the opportunity to make immediate adjustments

APPENDIX C
BALANCED SCORECARD WITH MEASURES

Strategic Map Presented in List Form

This list follows the sequence from Strategy to Tactics.
The standard *Balanced Scorecard* (BSC) sequence is followed:
Starting from Goal (Strategic Theme) to Objective to Measure
to Target to Initiative.

Included are columns to list possible owners, possible timelines, and to cross reference the measures with similar measures for objectives in other columns.

Please note: the C&E Strategic Management Team is responsible for the columns containing “Goals, Objectives, and Measures”. The remaining columns to the right represent possible scenario choices only and were filled in to provide a more comprehensive view of the BSC. They are NOT recommendations made by the SMS Team. They are represented in italics for this reason.

	<u>Objective</u>	<u>Measure</u>	<u>Possible Idea for Target(s)</u>	<u>Possible Idea for Initiative(s)</u>	<u>Possible Idea for Projected Date(s)</u>	<u>Possible Owner</u>	<u>Cross ref to other measures and BSC Perspective</u>
Goal 1: Build and maintain organizational excellence	1.1. Create and integrate a strategic management system (SMS) into day-to-day operations	1.1.1. Work-plan activities consistent with scorecard (EIC) dictated priorities	<i>Increase by 10% every six months</i>	<i>Develop new activities consistent with BSC</i>	<i>ID current projects that are already consistent: 1 month. New Projects to be measured at six month milestones.</i>	<i>EIC team member and Bureau Chiefs</i>	<i>2.1.1. is quite similar 3.1.2 and 4.4.2 have large overlap. Internal Systems</i>
		1.1.2. Managers who can articulate DEP and C&E goals in relation to the SMS	<i>Increase to 100%</i>	<i>Cascading training, Directors to Chiefs to Supervisors</i>	<i>1, 3, and 6 month milestones, six month projected end date</i>	<i>EIC team member</i>	<i>Concurrent with 1.3.1. Internal Systems</i>
	1.2. Ensure that management and staff function as a team to pursue C&E's Goals and Objectives	1.2.1. Peer and 360° evaluations of teamwork	<i>Increase positive evaluations by XX% after establishing baseline</i>	<i>Schedule (i.e. quarterly, annually, etc.)</i>	<i>Roll out idea with 45 days, give staff time to adjust. May be good idea to schedule at polar opposite calendar dates from PES reviews</i>	<i>EIC member with HR staff</i>	Learning & Capacity
		1.2.2. Effective meetings with appropriate partners	<i>Increase by XX% or XX#</i>	<i>Track using meeting criteria from training Maria, Knute, and Willy attended</i>	<i>90 days to track to establish baseline. Quarterly tracking afterwards. Annual target goals</i>	<i>EIC team member and Bureau Chiefs</i>	<i>2.2.2 is the same measure but for DEP partners outside C&E. Could be same initiative Learning & Capacity</i>
	1.3. Ensure staff at all levels understands the strategic management system and are supported in new and modified roles	1.3.1. Staff who can articulate C&E & DEP goals, and are comfortable with new roles	<i>Increase to 100%</i>	<i>Survey</i>	<i>3, 6, and 12 month milestones, 12 month projected end date, All new hires receive BSC training intro</i>	<i>EIC team member</i>	<i>Concurrent with 1.1.2. Learning & Capacity</i>
		1.3.2. Staff-level requests for intelligence products and/or training	<i>Increase to 80%</i>	<i>Outreach and Report run on quarterly basis.</i>	<i>1 year: 20% 2 year: 50% 3 year: 80% Outreach beyond BSC training TBD</i>	<i>EIC team member</i>	Learning & Capacity
	1.4. Engage employees at all levels by finding the best alignment between staff's skills and the needs of the organization	1.4.1. Employee mobility through lateral mobility program or management re-assignment	<i>Increase by XX%</i>	<i>May be tied to emerging issues like Barneget Bay, as well as budget and priorities</i>	<i>Dependant on mandate and budget information. Dates may shift according to ongoing emerging issues.</i>		Learning & Capacity
	1.5. Ensure appropriate and stable fees and funding	1.5.1. Appreciation of environmental ROI by stakeholders	<i>Surveys, group dialog at stakeholder meetings.</i>	<i>Secure environmental economics analysis</i>	<i>One year: baseline analysis and establish methodology Annual report follows, info disseminated</i>	<i>EIC team member</i>	<i>Supported by 5.1.1. and 5.1.2. Investment & Funding</i>

	<u>Objective</u>	<u>Measure</u>	<u>Possible Idea for Target(s)</u>	<u>Possible Idea for Initiative(s)</u>	<u>Possible Idea for Projected Date(s)</u>	<u>Possible Owner</u>	<u>Cross ref to other measures and BSC Perspective</u>
Goal 2: Collaborate with partners critical to C&E's mission, goals and objectives	2.1. Align C&E's objectives and initiatives with DEP's overall priorities	2.1.1. C & E activities, supporting overall DEP priorities and outcomes	<i>Increase by 10% every six months</i>	<i>Develop new BSC activities consistent with DEP goals</i>	<i>ID current projects that are already consistent: 1 month. New Projects to be measured at six month milestones.</i>	<i>EIC team member and Directors</i>	<i>1.1.1 supports this measure Internal System</i>
		2.1.2. Involvement & amount of Influence of C&E on priorities, decisions, initiatives, rules, etc	<i>Increase by XX% or XX# each year.</i>	<i>A. Develop tracking criteria and methodology B. Est. baseline C. Track and report</i>	<i>A. One month B. 6 months C. Monthly tracking with annual report card</i>	<i>EIC team member, + each program may need indiv owner</i>	Internal System
	2. Improve communication between C&E and other DEP programs	2.2.1. Partners that know C&E priorities	<i>Increase by XX%</i>	<i>Outreach and Survey</i>	<i>Survey after each applicable stakeholder meeting</i>	<i>EIC, stakeholder meeting coordinator</i>	5.1.1. Customer
		2.2.2. Count # of joint inspections and meetings with program partners	<i>Increase by XX# or XX%</i>	<i>A. Develop tracking criteria and methodology B. Est. baseline C. Track and report</i>	<i>A. One month B. 6 months C. Monthly tracking with annual report card</i>	<i>EIC team member, + each program may need indiv owner</i>	<i>1.1.2. Can fit inside 2.3.1. Customer</i>
	3. Explore and pursue two-way collaboration, job sharing and delegation opportunities with our internal and external partners to reduce C&E workload, and improve efficiency	2.3.1. Workload produced by/with partners	<i>Increase by XX%</i>	<i>A. Develop tracking criteria and methodology B. Est. baseline C. Track and report</i>	<i>A. One month B. 6 months C. Monthly tracking with annual report card</i>	<i>EIC team member, + each program may need indiv owner</i>	<i>2.2.2. supports a part of this Customer</i>
		2.3.2. Formal partnerships	<i>Increase by XX#</i>	<i>A. Develop tracking criteria and methodology B. Est. baseline C. Track and report</i>	<i>A. One month B. 6 months C. Monthly tracking with annual report card</i>	<i>EIC team member, + each program may need indiv owner</i>	Customer

	<u>Objective</u>	<u>Measure</u>	<u>Possible Idea for Target(s)</u>	<u>Possible Idea for Initiative(s)</u>	<u>Possible Idea for Projected Date(s)</u>	<u>Possible Owner</u>	<u>Cross ref to other measures and BSC Perspective</u>
Goal 3: Use science and data analysis to determine priorities and measure progress in achieving meaningful environmental health and safety objectives	3.1. Create and deploy an intelligence-led enforcement system that allows C&E to identify and focus on priorities and finding and fixing environmental problems	3.1.1. Targets identified and addressed (i.e., geographic, sector, non-attainment or other env. factors, GIS, community concerns, other)	<i>Increase by XX#</i>	A. Use GIS systems (Kevin Ball) B. Use volunteer data (D. Donkers). C. Est. other sources	A. & B. Establish initial and ongoing data sharing by six months, re-review at schedule TBD C. TBD	EIC team member	Supports 3.3.2. Supported by 4.4.all. Internal System
		3.1.2. Activities driven by priorities (intel)	<i>Increase by XX%</i>	<i>Dependant on other initiatives</i>	<i>Develop tracking criteria and methodology: 30 days</i> <i>Track and report: quarterly with annual report</i>	EIC team member	<i>This is the driver of 4.4.2.</i> Internal System
	3.2. Identify functions that no longer align with C&E's goals and objectives	3.2.1. Data products that support stopping mandates	<i>Identify All</i>	<i>ID budget and mandates</i>	21 days	EIC team member	Internal System
		3.2.2. Resources (FTE) removed from non-relevant mandates	<i>Increase by XX%</i>	<i>High level management decisions based on EIC data</i>	<i>Ongoing review, dependant on budget resources, emerging new projects, and staff availability</i>	EIC team member	Internal System
	3.3. Adopt the NJDEP's Cumulative Impacts model and use it to drive geographic targeting for multi-media C&E activities	3.3.1. Areas/communities targeted for C&E activities	<i>Enviro-sheds id'd and assigned</i>	<i>Pilot enviro-shed program</i>	<i>Pilot program begins: six months</i> <i>Phased out for other enviro-sheds: 18 months</i>	Art Z.	Internal System
		3.3.2. Reductions in pollutants at targeted sites	<i>Reduce by 5%</i>	<i>Results of multi-media approach to enviro-sheds, see 3.3.1</i>	<i>Every six months</i>	Art Z.	Internal System

	<u>Objective</u>	<u>Measure</u>	<u>Possible Idea for Target(s)</u>	<u>Possible Idea for Initiative(s)</u>	<u>Possible Idea for Projected Date(s)</u>	<u>Possible Owner</u>	<u>Cross ref to other measures and BSC Perspective</u>
Goal 4: Achieve high and meaningful compliance and foster sustainability	4.1. Conduct relevant, and consistent, enforcement while maintaining deterrence and ensuring no backsliding	4.1.1. Overall compliance rate for facilities measured over time.	<i>Reduce by XX% over life of facility. In other words, a just found site or a brand new facility should show an increase in compliance as a result of continued inspections.</i>	<i>Ascertain baseline data. This may already be occurring. Data must be gathered. Successful facility models must be compared to unsuccessful ones to see cause of dif.</i>	<i>Baseline data gathered within 90 days. Further dates TBD.</i>	<i>EIC team member</i>	Customer
		4.1.2. Consistency and fairness of enforcement actions	<i>Increase by XX% or XX#</i>	<i>A. In-house Document & SOP standardization. B. Surveys of facilities</i>	<i>A. 6 months B. Survey provided with renewal application</i>	<i>EIC team member</i>	Customer
	4.2. Expand capabilities beyond enforcement to achieve environmental results	4.2.1. Stewardship	<i>A. Increase by XX# of sites and/or activities. B. Longer term outcome target: Results of activities</i>	<i>A. TBD B. Envl analysis of site</i>	<i>A. six months B. Performed at five year cycles</i>	<i>EIC team member and Janet S.</i>	Citizen Shareholder
		4.2.2. SEPs	<i>A. Increase by XX# or XX\$ of SEPs. B. Longer term outcome target: Results of SEPs</i>	<i>A. TBD, dependant on SEPs adoption B. Envl analysis of site</i>	<i>A. six months B. Performed at five year cycles</i>	<i>EIC team member and Julie K.</i>	Citizen Shareholder
		4.2.3. Education Assistance	<i>A.# of people trained, B. # of events/classes C. Knowledge retained Behavior change D. Compliance rates</i>	<i>A. & B. determine tracking methodology C. Survey/test</i>	<i>A. & B. 60 days C. ongoing, beginning in 60 days D. track educated facilities annually, starting within 60 days</i>	<i>EIC team member and Michelle K.</i>	Citizen Shareholder
	4.3. Ensure processes address the needs of the regulated community, our stakeholders and the general public	4.3.1. Communication events/actions and surveys	<i>A. Increase in # and frequency B. Increase in positive survey responses</i>	<i>A. and B. Develop tracking methodology and design survey</i>	<i>90 days</i>	<i>EIC team member</i>	Citizen Shareholder
	4.4. Find and fix problems	4.4.1. Staff time self investigating resulting in a found problem	<i>Increase by XX%</i>	<i>Establish parameters, establish tracking methodology</i>	<i>9 months</i>	<i>EIC team member</i>	Citizen Shareholder

		4.4.2. Results of activities driven by priorities (intel)	Increase by XX%	Dependant on other initiatives	Develop tracking criteria and methodology: 30 days Track and report: quarterly with annual report	EIC team member	3.1.2. Drives this measure. Citizen Shareholder
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	<u>Objective</u>	<u>Measure</u>	<u>Possible Idea for Target(s)</u>	<u>Possible Idea for Initiative(s)</u>	<u>Possible Idea for Projected Date(s)</u>	<u>Possible Owner</u>	<u>Cross ref to other measures and BSC Perspective</u>
Goal 5: Communicate effectively to ensure transparency and accountability	5.1. Ensure our partners and stakeholders understand the SMS, its goals and objectives	5.1.1. Level of understanding of C&E Strategic Plan, Goals, priorities, etc	Increase by XX%	Outreach and Survey	Survey after each applicable stakeholder meeting	EIC, stakeholder meeting coordinator	2.2.1. supports Customer
		5.1.2. Stake holder meetings/ participants and Level of support	Increase by XX# or XX%	Develop tracking criteria and methodology	45 days	EIC team member	1.5.1. Customer
	2. Develop effective ways to clearly and timely communicate C&E actions, measures and results	5.2.1. Timeliness and effectiveness of accountability reports	Increase by XX# or XX%	A.Track time B. survey stakeholders for effectiveness	A. Commence immediately B. Include survey with each appropriate action, beginning in 90 days		Citizen Shareholder
		5.2.2. Greater use of C&E "services"- Green Start, Training, Self-reporting, Stewardship	Increase by XX# or XX%	Track numbers	Begin in 90 days		Citizen Shareholder

**Possible Ideas for DEP–Wide Program-Specific
Outcome Measures (May be Long Term)**

Air	Days above O3 standard		
	NOx + Voc releases/emissions		
	Day above PM2.5 standard		
	PM2.5 emissions		
	Sox + Nox emissions		
	Molded cancer risk (NATA)		
	emissions of carcinogens		
	diesel/ emissions		
	Mercury emissions		
	Odor complaints		
	# of major facilities TCPA, DPCC, AIR, CQGC, WATER		
	Spills-volume, number		
Land Use	Major incidents		
	Open/ Green spaces/ Preservation		
	Wetlands- fresh/coastal		
	Habit- Biodiv., Endangered species		
	Brownfield/reclamation		
Pesticides	Smart Growth/density/transportation		
	Exposures/miss-use		
	Illegal products		
Water	Total use/IPM		
	Miles of impaired waterways		
	Discharges BOD, Solids, Nutrients, Metals, Fecal		
	Discharges-Point/Non-point Impervious cover		
	Drinking Water Quality (MCL exceedances) THMS, Lead, Nitrates, Arsenic		
	Water reserves		
Wastes	Water conservation		
	Recycling rates eWastes, by class, composting		
	Waste minimization		
	Beneficial re-use		
	Final Disposition/life-cycle impacts		
	Cost? /fair-equal?		