# Section 9
# Institutional, Regulatory and Financial

## 9.1 GENERAL

As previously noted, the ALCOSAN service area consists of multiple jurisdictions that are extremely diverse with respect to area, population, population density and economic status. The apparent wide range in the existing conditions of the individual sewerage collection systems further complicates this issue. Another compounding factor is the number of agencies involved in attempting to address the wastewater issues confronting the area.

In reviewing the Concept Plan it must be kept in mind that the initial draft was released over three years ago (March 1999). The Concept Plan was released in 1999, but the supporting data was compiled and analyzed over a period of years prior to 1999. The revenue data that was supplied to the review to support the financial aspect of the plan was a Black & Veatch report dated November 2000 entitled Revenue Requirements, Cost of Service and Rate Design. It was subsequently learned that this report was developed to support the bond issuance and not as a part of the Concept Plan. A recent conversation with ALCOSAN's financial staff indicates the next bond issue may be required in 2003 as opposed to the 2004 date outlined in the B&V report.

The Concept Plan was intended to address wet weather issues in the ALCOSAN system and, as such, the plan only addresses the problems created by those flows that arrive at the interface with their system. With the exception of recommending the Municipal Collection System Rehabilitation and/or Reconstruction Program, it does not address other issues, costs and significant hurdles that the satellites must resolve under the present approach. This section is intended to delineate these issues and outline alternate approaches that may be considered in the following areas:

- Institutional Issues – Including the various government and non-government agencies that influence or need to influence any concept plan.
- Regulatory – Including the regulatory agencies that influence the plan, the law, regulation, policy and guidance that must be addressed, enforcement issues and agreements.
- Financial – Including the cost of the plan, means of funding, institutional arrangements to fund the plan, the affordability of the plan and revenue raising options.

## 9.2 INSTITUTIONAL ISSUES

### 9.2.1 General

The principal stakeholders in the sanitary sewer remediation issue in the ALCOSAN service area are as follows:

- ALCOSAN
- Local jurisdictions (83) including 12 overlying Authorities
- The City of Pittsburgh Water and Sewer Authority
- Environmental organizations such as Three Rivers 2nd Nature
- Allegheny County Health Department
- 3 River Wet Weather Demonstration Project
- US Environmental Protection Agency
- Pennsylvania Department of Environmental Protection
- Federal Court System*

* The Federal Courts are listed due to pending litigation

These stakeholders have both common and conflicting interests. Some jurisdictions have moved forward with significant investments in their sewage collections systems while others have not. Some are under greater regulatory scrutiny than others and may have resulted in particular stakeholders 'holding their cards close to their vest". There is a wide spread feeling, either actual or perceived, by the various stakeholders that ALCOSAN could have been more open in interacting with the Satellites in the development of the Concept Plan. The same comment is made about the status of the negotiations with the regulators with respect to ALCOSAN's pending consent order. Common comments heard include:

***" How can I plan when I don't know what the biggest player's approach involves?"***
***"How can I do a LTCP when I don't know how much flow ALCOSAN will take?"***
***"ALCOSAN should take all the flow we produce"***
***"We met with them and consulted with them on that, how can they say they were not involved….."***

ALCOSAN staff appears to feel that they have been open and inclusive. The satellites feel they did not participate in the development of the plan. In moving forward it will not be particularly helpful to resolve which group is correct about the past. There will, however, be a need to work together more closely and openly than in the past in developing the way forward and in dealing with the regulators.

While the role and concerns of the stakeholders is obvious, it is appropriate to address the unique role of the Three Rivers Wet Weather Demonstration Project (3RWWDP) which was established in 1997 with the following mission:

The mission of the 3RWWDP is to establish and to promote the technical means, the institutional structures and the financial mechanisms needed to control existing sewer overloading within the municipalities of Allegheny County and to demonstrate the best wet weather flow management practices to control overflows at the least possible cost and impact. Public awareness and inter-municipal cooperation are fundamental to the success of the program.

The 3RWWDP provides these services principally through grants to the communities. These grants are funded from Federal, State and local resources including ALCOSAN. In addition to administering grants, 3RWWDP has been acting as a conduit between the regulatory agencies and the communities on enforcement issues. The 3RWWDP is governed by a board comprised of two appointees nominated by the ALCOSAN Board, two appointees from the Allegheny County Board of Health, and one active member of the Allegheny County delegation.

### 9.2.2 Operational Issues

The 83 communities that are tributary to ALCOSAN, in addition to PWSA, are responsible for their separate and combined collection systems. The trunk and interceptor systems that pass through their communities are, in most cases, covered by inter-jurisdictional agreements to convey flow from upstream communities to downstream communities or ALCOSAN and SSO points and CSO points within their community. Twelve (12) Sewer Authorities overlie many of the 82 communities providing sewer construction and maintenance for member communities although a significant number of communities, including smaller jurisdictions, operate their sewer system independently. These jurisdictions include cities, boroughs, townships and towns that are governed by elected officials and subject to specific responsibilities based on their classification by the Commonwealth.

The largest jurisdiction in the ALCOSAN system is the Pittsburgh Water and Sewer Authority (PWSA), which is responsible for the City of Pittsburgh collection system including separate and combined areas serving approximately 400,000 people. PWSA also has a water supply system that supplies only a portion of is sewerage collection area but collects its entire sewer maintenance revenue only from these water customers. The PWSA system includes numerous CSOs and a significant number of the principal conveyance/drainage areas tributary to the ALCOSAN system. PWSA has conveyance agreements with approximately 40 other communities in the ALCOSAN service area, which are the means of sharing the cost of the "common facilities", used by both PWSA and these surrounding communities. A Board of Directors appointed by the Mayor of Pittsburgh governs the PWSA.

Each of the local governments, to a greater or lesser extent has attempted to limit their responsibility for the problems. The facilities recommended in the plan address flows that arrive at the ALCOSAN interceptors. The plan does not provide facilities needed to get those flows to ALCOSAN. Some communities argue that ALCOSAN is required to provide facilities that address all their flows under the current agreements relieving the local community of the responsibility to control infiltration and inflow to the ALCOSAN system. While some communities and authorities have established improved sewer monitoring and maintenance programs, others have done little beyond the minimum required to respond to the 308 letter information requests.

#### 9.2.2.1 Interim Overflows

Other communities are concerned that ALCOSAN is addressing the flows from the communities closest to their interceptors, while leaving the flow problems remote from the ALCOSAN interceptors to them. This is perceived as unfair to the communities that have addressed their own flows without expanded facilities from ALCOSAN. As shown in Section 6, due to the limitations of the tunnel system, certain drainage basins are excluded from the ALCOSAN system during wet weather conditions. The Concept Plan addresses this by providing treatment or storage facilities in the plan for the flows excluded from the collection system. There are several issues associated with this aspect of the plan that need to be examined openly with the satellites and the regulatory agencies as follows:

- The plant expansion will be complete long before the storage and satellite treatment facilities are in place. During the interim period, communities close to the plant will generally have more flow abated than those far from the plant. It is important that these remote communities are not singled out for enforcement during this period for Interim Overflows.
- No exceptional costs should be laid on the communities that are served less by the tunnel system and more by facilities in the satellite communities.
- How should the tunnel system be operated to minimize regulatory issues and provide benefits?

These issues will not be easy to resolve, in part do to differences in the satellites. A survey conducted by the 3RWWDP in 1999 attempted to collect data with respect to the operation, maintenance and funding of the sewer systems from the 83 jurisdictions. However, the data that was submitted was inconclusive. The principal finding of the survey, other than to show the advanced age of most of the systems, was to confirm that a wide variation in the operation, maintenance and funding of the sewer system exists between communities.

### 9.2.3 Historical and Present Engineering Approaches

The Concept Plan approached the wet weather discharge remediation issue through the use of eight (8) separate drainage areas to the extent of their perceived system responsibility. However, the 3RWWDP facilitated the organization of the Satellites and their engineers into three basin groups labeled East, West and North to address regulatory issues. These Basin Groups are defined by the natural boundaries created by the Allegheny, the Monongahela and the Ohio Rivers. Based on antidotal comments by the principals involved, this arrangement resulted from the difficulty of coordinating the activities of a greater number of groups. At present the basin groups are becoming increasingly active and knowledgeable of the issues facing the Satellites. This practical experience should be considered when looking at an organization structure at least in the initial approach to the problem.

### 9.2.4 Institutional Conclusions

Based on the above, it is clear that the resolution of wet weather discharges in the satellite system must address the following institutional issues:

- Operational and financial responsibility for systems that cross jurisdictional boundaries
- Significant variations that exist with respect to the condition of the collection systems
- Significant variations that exist with respect to per capita flow rates exist from each Satellite regardless whether they are separate or combined collection systems
- Practical and regulatory aspects of interim overflows (see above for definition)
- Legal practicality of existing and future inter-jurisdictional arrangements
- Development of inter-jurisdictional agreements on a rational basis such as by drainage basin
- Delineating a specific role for 3RWWDP in developing a control plan
- Should the Satellites singularly or in groups want to develop their own plan(s) or should they be part of an overall ALCOSAN service area control plan
- The need to address affordability for low MHI jurisdictions due the interdependence of the collection systems

## 9.3 REGULATORY ISSUES

### 9.3.1 General

Section 3 provides an in-depth review of the significant regulatory background that frames the present wet weather issues facing this area. The following is an attempt to look at these issues in light of what is required to develop a practical approach to the resolution of the issue.

### 9.3.2 Regulatory Agency Roles

The Allegheny County Health Department (ACHD) serves as the delegated local enforcement agency for Pennsylvania Clean Streams Act and the Sewage Facilities Act. Under this authority, the ACHD provides facilities review and oversees the enforcement issues of Allegheny County's collection systems, 91 publicly owned wastewater treatment plants and 141 industrial dischargers. The ACHD also oversees the county septic systems, however improper maintenance and poor soil conditions throughout Allegheny County limit the future use of private sewage disposal systems as an alternative to public sewers. Failing septic systems are a significant problem in the County and are likely sources of stream contamination of streams in the ALCOSAN service area.

The Pennsylvania Department of Environmental Protection (PaDEP) is the Federal Clean Water Act delegated agency for issuing and enforcing discharge permits. There are 24-sewage conveyance and/or treatment systems in the ALCOSAN service area that are presently under PaDEP tap-in restrictions due to overloaded sewage facilities.

The United States Environmental Protection Agency (USEPA) has oversight responsibility of PaDEP through its Region III office in Philadelphia and Headquarters in Washington D.C. Region III must approve major permits.

Regulatory Agencies have three separate roles in the control plan process. These are:

- Water Quality Standards Development and Review. This role includes establishing attainable uses for the waters impacted by the concept plan and the criteria that will support those uses.
- Permitting – The Permitting responsibility includes the requirement to develop technology and where necessary, water quality based permits for each watershed. The purpose of these permits is to obtain the uses designated by the Water Quality Standards.
- Enforcement – The enforcement role of regulatory agencies is to ensure that the permits are met. Agencies have the power to deny discharge permits (which as a practical matter limits growth), impose fines and require plans and construction of facilities to meet permit limits.

To date the regulatory agencies have only approached the concept plan from an enforcement point of view. This has included the issuance of the ALCOSAN permit requiring the concept plan, 308 letters to the communities requiring information indicating violations of the clean water act, submitting a draft consent decree to ALCOSAN in response to the draft LTCP and recently calling for consent orders for the Partner Communities requiring unrealistic and punitive measures. An example of this approach is the latest proposed consent order for the ALCOSAN Satellites that contains the following unrealistic requirement:

***By June 1, 2005, the Municipality shall complete corrective actions to ensure the removal of sources of extraneous surface water and/or groundwater from that entire portion of its sanitary sewer system that may be directly or indirectly tributary to the ALCOSAN Sewer System. These corrective actions shall include the diligent prosecution of enforcement actions against private property owners to remove illegal connections.***

To be effective, the regulatory role needs to be expanded beyond enforcement to consideration of watershed issues and water quality standards. The issues not adequately addressed to date by the regulators include the need to examine the water quality of the streams to determine where and why the uses are not being met. The permitting process should be conducted to result in water quality standards being met. Upstream loads, stormwater issues and other pollutant sources are not yet quantified, yet alone considered in the permitting process. Addressing these responsibilities takes resources that the regulatory agencies presently do not have available.

### 9.3.3 Regulatory Status

From the regulator's enforcement point of view, the separate communities have unpermitted overflows. However, theses overflow points were designed into the system. In many ways the areas designated as separate were designed by using combined sewer design concepts and were approved by the regulators at the time of construction. The current regulatory agency staff sees these designed overflows as illegal and are loath to consider permitting them as they have for the CSO communities.

With the exception of PWSA, the satellite CSO communities have been issued permits. These permits call for the implementation of two of the three requirements of the National CSO Law as follows:

- Documentation of the Nine Minimum Controls. These controls are technology-based controls expected to be implemented on a site-specific basis. However, in calling for these NMC in permits, PaDEP did not appear to have conformed to the EPA CSO policy (now law) by requiring that they be implemented on a site-specific basis.

- Development of a Long Term Control Plan. The CSO permits called for in each partner community will have to include a requirement to develop a long-term control plan that will meet water quality standards. As a practical matter this is an impossible task for the communities without knowing what ALCOSAN's plan is.

The requirement to review and, where appropriate, revise the water quality standards is not addressed in the CSO permits. However, the inclusion of this requirement would have presented the communities with an impossible task because PaDEP has indicated they will not address Water Quality Standards in a LTCP process. This does not conform to the EPA CSO policy or federal law.

PWSA applied for a permit for their CSOs, however PaDEP has not responded to their application. However, even if PWSA were issued a permit for their CSOs, they would not know how to proceed with their CSO plan. To proceed they, as any other community, need to know what flows and loads ALCOSAN can accept and they need a coordinated review of the WQS with PaDEP. Although this review has examined the available information on drop shaft capacity and how the tunnel capacity can be distributed, simply having capacity information does not resolve how to develop a LTCP in each community. There is a great need for these plans to be developed together with ALCOSAN's ultimate plan for the operation of the system.

Recently, the 83 jurisdictions were presented with proposed Consent Orders from the regulatory agencies that would require them to commit to a compliance plan with significant associated costs of an undetermined magnitude and specific penalties for non-compliance. At this time, this proposal is under consideration by the jurisdictions and drawing considerable concern and comment from the jurisdictions.

### 9.3.4 Needed Regulatory Changes

The regulatory institutions need to re-evaluate their role in developing a practical solution for the waters of Allegheny County. These changes include, but are not limited to, the following:

- Take an active part in determining the source and the solution to water quality problems. This includes participating in monitoring of the waters, establishing the point and non-point sources of pollution that prevent use attainment and conducting a use attainability analysis for the waters.

- Establish the permitting and non-permitting actions needed to address and meet the designated uses.

- Establish an enforcement policy in concert with addressing the watershed needs in an organized and prioritized approach that recognizes the institutional and economic conditions of the permittees.

- From a practical point the regulatory agencies may not have resources available to them to complete their responsibilities in a timely manner to develop a rational solutions to the area's wet weather issues. As the lack of availability of this data may result in a more severe approach than is justified, it may be in be in the overall best interest of the jurisdictions to partner with the regulatory agencies to accomplish this work through the watershed approach described in Section 6.

## 9.4 FINANCIAL CONSIDERATIONS

### 9.4.1 General

Before discussing financial issues it must be recognized that expenditures by the satellites and ALCOSAN, are eventually borne by the same people (households). It does not matter if ALCOSAN or the satellites spend the money, the local people will have to pay for it, unless there are outside grants.

The total cost of wastewater control for the ALCOSAN service area is presently a very loosely defined number with present estimates ranging from $2.0 to $3.0 billion. If it is assumed that residential customers pay this cost, this program represents a per-household investment between $6,800 and $10,000. Even at the lower end of the estimated cost per household this level of investment will be unaffordable to a significant number of the financially challenged ALCOSAN Partner Communities that operate satellite systems in this service area. (See Section 6.)

Financing is further complicated by the fact that any cost-effective solution to the area's wet weather problems can only be achieved through the implementation of a comprehensive plan based on a drainage basin approach where timely participation by all the satellites in that basin is critical. Affordability problems for one satellite then become an issue with other satellites in the basin that may not have an affordability problem.

The effective approach to provide use benefits would be to start remediation of the satellite systems at the upper end of each trunk system and work down the trunk system to the ALCOSAN interceptor system. Under a typical Sewer System Evaluation Survey (SSES) Approach sewer systems are remediated only when it is less expensive than conveyance for treatment. To take this approach, the cost of remediating sewer systems has to be compared to the total cost of wet and dry weather conveyance and treatment. This approach would insure that the full value of the up-gradient rehabilitation investment and any achievable reduction in I&I would be realized in the costs associated with correcting the down-gradient trunk system issues. This would include the minimization or elimination of any online storage that would be required to resolve SSO issues as well as any treatment facilities (swirls) that would eventually be required at the main rivers to resolve the CSO issues.

The immediate expansion of the ALCOSAN treatment plant to a capacity of 875 MGD as indicated by the knee-of-the-curve analysis in Section 8 is clearly compatible with this approach. Proceeding with other elements of the Concept Plan is not as clear.

To realize the full value of such an approach the remedial work would have to proceed on sequential basis and projects could not be delayed due to a satellite system's lack of financial resources. If the entire ALCOSAN service area was one jurisdiction, such a concept would be obvious and it would fall neatly into the regulatory box. However, as there are multiple jurisdictions involved, such a solution has received little or no attention as a viable approach to date.

In addition to the interdependency issue, sufficient technical background data does not presently exist to develop an effective and efficient remedial program to correct the problems associated with the ALCOSAN's service area wet weather overflow issues. Each basin will likely have different costs of remediation and different costs of conveyance and treatment. Each basin's trade off in costs must be assessed.

### 9.4.2 Methods Available for Financing Remediation Programs

This issue is initially driven by the necessity to move ahead with some progress in the near future to address the needs of the regulators and the courts. As it has been estimated by 3RWWDP, the cost of the system assessment proposed in the draft consent orders will exceed $20 million per year for the first three years of the program. Accordingly, it would appear that a two-phase funding strategy is necessary due to the following:

- The immediate need for funding is significant.

- The practical aspect here is that it will take significant time to develop a long term funding strategy that will be acceptable to the diverse jurisdictions. It is likely that if consensus is reached on a long term funding strategy, some initiative and legislative action may be involved.

The development of a long-term funding strategy must resolve the following basic issues:

- The cost of service issue with respect to ALCOSAN's present billing methodology; i.e., billing on the amount of water consumed that has no relation to either their facilities (debt service) costs or O&M costs due to the I&I and CSO issues. Can the jurisdictions agree that the costs associated with this issue can be considered a "heritage cost" to be shared over the entire service area; or,

- Should these costs be allocated to the jurisdictions with wastewater flows that are disproportionate to water consumption?

- If the latter alternative is either selected by all the jurisdictions, or is in fact the position of only a small number of jurisdictions, how is the affordability issue addressed with respect to proceeding on a cost-effective long-term plan?

With these concerns in mind, the following methods of financing the needed infrastructure improvements and increased O&M improvements are available:

1. Water Rate - Fund all costs through ALCOSAN's present rate methodology; i.e., prorating costs equally on water consumption.
2. "Pay to Play" concept; i.e., base rates on an actual cost of service per gallon treated and bill individual satellite facilities on flow. Let each Partner Community find a way to pay ALCOSAN or fund its own facilities.
3. Taxes - Use ad valorem or "sin" taxes to fund capital improvements while selecting either Item 1 or 2 above to fund O&M costs.
4. Impervious Area - Institute fee to each parcel of land in proportion to the impervious area of the parcel. Use this to fund capital, operations and maintenance costs.
5. Seek County, State and Federal grants.

With respect to these limited alternatives above the following comments are made:

**Option 1 – Water Rate:**

- Many jurisdictions find this aspect to be unfair, especially those that have striven to upgrade their collection system.
- It does not provide an incentive to either reduce water consumption or reduce I&I.
- It is simple.

**Option 2 – Pay to Play:**

- Requires significant metering and associated ongoing metering maintenance and calibration as the flow data represents money title community.
- Cannot be implemented in the near term.
- Promotes water conservation and I&I reduction.
- Would probably impact lower MHI jurisdictions the hardest.

**Option 3 – Taxes:**

- Technically could be implemented in a reasonably short term but not soon enough to fund the initial system survey work.
- Can be seen as placing disproportionate costs on satellites that have better maintained systems.
- Is seen as a progressive tax that impacts the higher property value communities unfairly.

**Option 4 – Impermeable Area Fee:**

- This approach is non-traditional but has been used recently in funding storm water programs.
- Has been generally used in jurisdictions that have the good GIS mapping capabilities necessary to work up the impermeable area calculations.
- Has not raised much criticism where it has been used but generally the costs associated with storm water programs are significantly below the costs that are involved here.

- Assigns significant costs to facilities that have large impermeable areas such as shopping centers, but which generally produce low levels of sewerage.
- Clearly this alternative could not be implemented in the near term.

Based on the nationwide trends for funding these programs, the ultimate solution is likely to be a combination of these methods.

### 9.4.3 Grants and Loans

The traditional source of funds for water pollution control projects has been the federal government. The level of this funding is described in Section 5 – Trends.

The emphasis on Federal Clean Water Act grants has shifted to State Revolving Fund (SRF) Loans and direct Congressional appropriation grants. The SRF funds normally require the money to be paid back often at low interest rates. At times, repayment has been forgiven.

The Pennsylvania Infrastructure Investment Authority (PENNVEST) the Commonwealth's revolving loan fund, recently awarded $82.5 million in low interest loans and $13 million in grants for water and wastewater in Pennsylvania. Almost $6.0 million was awarded to PWSA for a water line project and over $500,000 to Plum Borough for a new collection line to replace failing septic tanks.

The Pennsylvania legislature created the Growing Greener program in 1999 with an anticipated 5 year funding level of $650 million of which $100 million was to come from the State general fund. However, the fiscal condition of the general fund is such that this appropriation has been spread out over a longer time frame. It is expected that the full amount will eventually be received. It is expected that these funds will be most available to small programs.

Another issue to be considered with respect to grant funding is that most of the monies that become available go to projects that have been developed very carefully to show the financial need of the host community. It is good financial policy to continue to pursue grant funding when and where it becomes available but this needs to be a full time policy not one that is implemented when a specific need arises. The communities that have been most effective in obtaining significant grants (30 to 90% of the program costs) are those that make grant pursuit a long-term priority.

### 9.4.4 Financing Recommendation

For the Concept Plan to evolve into an implementable facilities plan, it is necessary to obtain information about the flows and condition of the satellite systems and to determine the level of cost effective I/I removal. It is recommended that ALCOSAN fund a significant part of this effort. Consideration should be given to a rate increase to generate approximately $25 million per year. The monies would be used to kick-start a comprehensive remediation program with cash in a manner such as is outlined below. It would be poor financial policy to use debt funding for this work, as no actual assets would be added to the system as a result of these expenditures.

During the period when the evaluation work is being done, and hopefully when it becomes clearer what type of long range control plan the regulators will accept, a blue ribbon panel representing a cross section of the stakeholders should develop a long range financial strategy. It will be imperative all of the jurisdictions involved buy into this work product, as it would be expected that this financial plan would become an integral part of any long-range accommodation reached with the regulators.

This investment is in the best interest of ALCOSAN and its satellites for many reasons, including:

- The flows from the various sub-basins are needed to move on to the next phase of ALCOSAN facility planning.

- These monies will be used to reduce cost effective I/I in the next phase. This will reduce flows to ALCOSAN during wet and dry weather, reducing capital and operating costs for all ALCOSAN ratepayers.

### 9.4.5 Precedence for a Pragmatic Approach

The City of Norfolk, Virginia recently found itself in a situation with the regulators not unlike that presently facing the satellites to the ALCOSAN system. The city has an aging sewer system that had been neglected for a long period of time and the wettest summer of record caused problems that attracted USEPA Region III's attention. The first approach by the Virginia's Department of Environmental Quality (DEQ) was that the City would be required commit to a capital program to totally resolve the problem or face enforcement action.

As the City demonstrated that it had already developed a plan to address the issue, DEQ was willing to go along with the City's approach. The agreed to plan was to address the problem through a short-term (3-year) special consent order under which a full Sanitary Sewer Evaluation Study would be completed and a report forwarded to DEQ. This report would become the basis for the negotiation of a second longer-term consent order that would address needed capital improvements. The understanding that a second order was contemplated by both parties was referenced in the first order. In addition, the first order also contained some minor capital and operating commitments that the City was already in the process of implementing. It is also interesting to note that the Hampton Roads Sanitation District, of which Norfolk is a satellite, was also a party to the order although their only commitment in the order was to basically agree to work with Norfolk by supplying needed system information to the City's consultants.

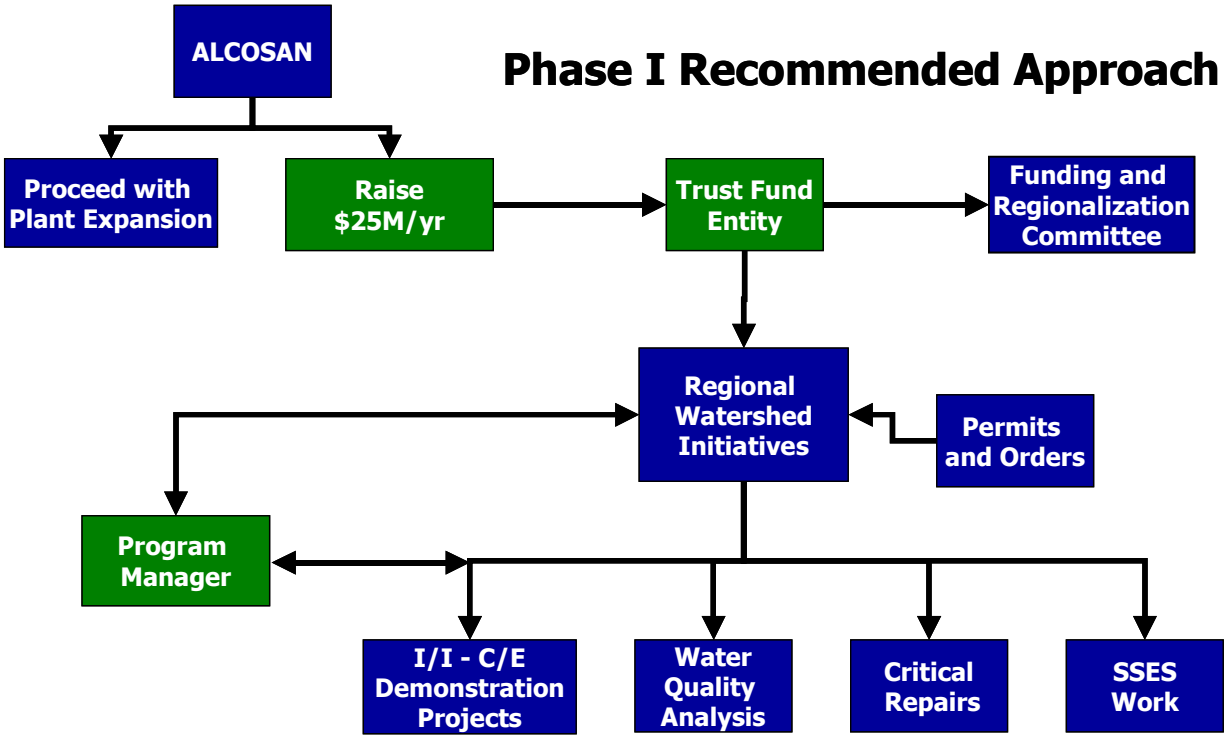
Region III initially objected to this approach and threatened to over-file if DEQ accepted this solution. However, once it was demonstrated that the City had a constrained ability to do every thing at once and that the study approach would insure that the improvements with the biggest environmental impacts would be done first, USEPA agreed to accept the process outlined. In effect, it is felt that USEPA Region III's acceptance of the Norfolk solution has set a precedent for a phased approach in other areas.

### 9.4.6 A Framework for Phase I

To effectively address the area's wet weather overflow issues and at the same time show progress in the near term, the only viable approach is to divide the work into phases. A detailed list of roles and responsibilities for the various parties is discussed in detail in Section 3. The overall goals of Phase I can be summarized as follows:

- Implement the portions of the Concept Plan that are clearly cost effective and that will be part of any final Plan for the region (such as expanding the Wet Weather Capacity of the WWTP).
- Proceed to inspect priority areas of the collection system and correct structural deficiencies.
- Gather the information needed to complete comprehensive facilities plans designed to achieve appropriate water quality standards.
- Set up and put into motion a process to determine the ultimate wet weather water quality requirements.
- Establish organization and structure for final LTCP development and facilities/watershed planning group(s).

An implementation framework for addressing these roles and responsibilities is shown on the following figure.



It is important that a number of initiatives proceed. It is equally important that others await the development of the information needed to proceed logically.

The above chart suggests particular Phase one actions proceed as follows:

- ALCOSAN proceed with the Plant and Tunnel Expansion.
- ALCOSAN raise funds to assist the partner communities in projects that are ultimately in ALCOSAN's and the Partner Communities' interest.
- Establish a Trust Fund Entity to administer these funds.
- Constitute a Blue Ribbon Committee to determine long term Funding and regionalization actions.
- Initiate a regional watershed approach using a program manager.
- Use this program manager to assist Partner Communities in conducting the Phase I actions described above.

It is anticipated, that it will take considerable time to complete these tasks, given the limited amount of information available at this time from several jurisdictions.

While this may seem like an extended time frame, such an approach must include time for report preparation, public outreach, and consensus building between the 83 jurisdictions as well as the negotiations with the regulatory agencies. The time frame allowed in Norfolk was only three years but the City did have the basis for an asset management system in place and was not confronted with the issue of dealing with 83 diverse jurisdictions.