NEW YORK STATE WATER RESOURCES INSTITUTE

Department of Earth and Atmospheric Sciences

1123 Bradfield Hall, Cornell University
Ithaca, NY 14853-1901
http://wri.eas.cornell.edu

Tel: (607) 255-3034
Fax: (607) 255-2016
Email: nyswri@cornell.edu

Water and Sewer Infrastructure: Implementation of SGPIPA through the CWSRF and DWSRF

October 2014

Eleanor Andrews, Heidi Mouillesseaux-Kunzman, and David Kay
Community and Regional Development Institute
Department of Development Sociology
Contacts: hmm1@cornell.edu and dlk2@cornell.edu



Abstract

This report is intended to familiarize readers with New York's Smart Growth Public Infrastructure Policy Act (SGPIPA) and its implementation by the Environmental Facilities Corporation (EFC) and the Department of Health (DOH). These agencies administer a range of programs; the two most relevant to SGPIPA and sewer and water infrastructure – the Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF). Together these two funds are a primary source of support for the development of public and private sewer and water systems. Overall, it is clear that both DOH and EFC have taken the responsibility of implementing SGPIPA seriously. Relatively few projects require Statements of Justification because meeting SGPIPA criteria is deemed impracticable, typically for human health reasons.

Summary Points of Interest

- The CWSRF has "provided $14 billion in low-cost financing" for infrastructure since 1990. The DWSRF has "provided more than $4.2 billion in low-cost financing including over $316 million in grants" for drinking water infrastructure since it began in 1996.
- Both the DWSRF and CWSRF require applicants to complete and submit a Smart Growth Assessment form. Although the applicant's response to the Smart Growth Assessment form plays no role in scoring the project or its rankings, the information is taken into consideration by respective agency staff as part of the technical review process. It is the intent of the respective agencies that their project reviewers (engineers) work with the project applicants to

ensure that a project is well-designed, including the incorporation of Smart Growth principles, to the extent practicable.

- The same SGPIPA criteria are used to review both clean water projects (i.e., projects for wastewater treatment) and drinking water projects, though their implications for smart growth can differ. For wastewater, on-site treatment is often the most feasible design alternative and when sewers are needed to replace failing on-site systems, the engineering design can restrict the capacity for additional users. The need for new drinking water systems is mostly driven by contaminated or dry wells. In order to protect public health and to meet the required standards for water supply and fire suppression, water may be distributed from an existing supply or new supply to existing residents in suburban or rural settings which do not meet the criteria for a municipal center.

Keywords
Smart Growth Infrastructure Policy Act; Smart Growth Impact Statements; Drinking Water State Revolving Fund; DWSRF; Clean Water State Revolving Fund; CWSRF; Department of Health; Environmental Facilities Corporation.

Introduction[1]

This report is intended to familiarize readers with how New York's Smart Growth Public Infrastructure Policy Act (SGPIPA) is being implemented by state agencies and authorities that approve funding for sewer and water infrastructure. In this paper, we focus on SGPIPA implementation by the Environmental Facilities Corporation (EFC) and the Department of Health (DOH). These agencies administer a range of programs; the two most relevant to SGPIPA and sewer and water infrastructure – the Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF) – are discussed below. Together these two funds are a primary source of support for the development of public and private sewer and water systems.

The EFC, DOH and State Revolving Funds for Sewer and Water Infrastructure

The New York State Environmental Facilities Corporation (EFC) is a public benefit corporation empowered by NYS law to administer and finance the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) (as required by federal law) and to provide technical assistance for projects led by private and public entities to ensure that they comply with state and federal environmental protection requirements (EFC, 2014a). Chief among its responsibilities is funding and technical assistance for infrastructure projects that protect water quality, improve drinking water infrastructure, and properly manage stormwater (EFC, 2013a).
The mission of the New York State Department of Health (DOH) is to "protect, improve and promote the health, productivity and well-being of all New Yorkers" (DOH, 2012). The DOH plays a key role in maintaining water and sewer infrastructure, to ensure a safe drinking water supply and safely treat sewage and other waste.

As noted in the introduction, these two agencies support the development of sewer and water infrastructure through two programs: the Clean Water State Revolving Fund, which is jointly administered by EFC and the New York State Department of Environmental Conservation (DEC)[2], and the Drinking Water State Revolving Fund, which is administered jointly by EFC and DOH.[3] In essence, both agencies address threats to public health and the environment. However, the agencies make a clear distinction between the two types of infrastructure projects supported by these two state revolving funds. Infrastructure projects that help make water available for human consumption are referred to as drinking water projects and are funded through the Drinking Water State Revolving Fund (DWSRF). Infrastructure for sewer and wastewater, on the other hand, are referred to as clean water projects and are funded through the Clean Water State Revolving Fund (CWSRF). Both revolving funds are able to finance and fund dozens of projects every year through low-interest loans and grant money. The CWSRF has "provided $14 billion in low-cost financing" for infrastructure since 1990 (EFC, 2014b). The DWSRF has "provided more than $4.2 billion in low-cost financing including over $316 million in grants" for drinking water infrastructure since it began in 1996 (EFC 2014d).

[1] We wish to thank and acknowledge Kathryn Macri, Environmental Policy Coordinator and Sandra Allen, Director of Policy and Planning, with the Environmental Facilities Corporation, and Michael Montysko, Design Section Chief, Department of Health for the time they took to help us understand the agencies' implementation of SGPIPA.

[2] The DEC is the NYS executive agency responsible, under the Federal Clean Water Act and NYS Law, for the administration of the CWSRF (DEC and EPA 2006, p.1). The EFC is a public benefit corporation created under NYS law and "empowered to administer and finance" the CWSRF (EFC 2014g). As such, the DEC and EFC jointly administer the CWSRF program, under a Memorandum of Understanding. (DEC and EPA 2006, p.1)

[3] EFC administers the financial aspects of the DWSRF. Complete applications for the DWSRF financing are submitted to EFC, the financing is obtained through EFC, and repayments are made to EFC. DOH manages the technical review for DWSRF projects and regulates the safety and adequacy of drinking water delivered by public water systems in New York State. For the DWSRF, DOH accepts pre-application forms and technical reports; scores, ranks, and lists projects on the IUP, and reviews technical documents for both the pre-application and the complete application.(EFC, 2014d)

SGPIPA Compliance

Before outlining how these two agencies are fulfilling their obligations relative to SGPIPA it is important to note that the way they are doing so has evolved since SGPIPA first passed in 2010. This evolution is reflected in multiple versions of the Smart Growth Assessment form used with both the CWSRF and DWSRF programs and the process for completing them. For example, in the sample reviews we were given by agency staff, one version is the "EFC SRF Smart Growth Project Review Checklist DRAFT REVISION February, 17, 2011; another is the "Smart Growth Assessment" for previously approved DWSRF projects revised October 15, 2012; and another is a "Smart Growth Assessment" for DWSRF projects revised April 2013.

On the DWSRF forms, moreover, the EFC is acknowledged for developing the CWSRF form on which the DWSRF form is based, suggesting the agencies have worked together to proactively comply with SGPIPA and integrate related requirements into their program.

It is also important to note that when the law was first enacted, agency staff completed the information required on the Smart Growth checklist. The more recent assessment forms must be completed by program applicants reflecting the agencies' intent to increase awareness of SGPIPA among applicants.

Similarly, successive iterations of the DWSRF Final Intended Use Plans (IUPs) chart the adoption and institutionalization of Smart Growth through the SGPIPA. IUPs document how the available funding every year will be distributed based on how individual projects are scored and ranked. Projects' scores reflect the overall goals of the DWSRF. Changing language and placement of information about SGPIPA requirements detail the evolution of the agencies' compliance. In 2010, the DWSRF IUP read:

> *New York State encourages applicants to consider Smart Growth principles in the financing of all infrastructure projects within the State. The DOH and the EFC promote Smart Growth principles for drinking water projects recognizing, however, the limitations placed on funding development and future population growth by DWSRF financed drinking water projects (DOH and EFC, 2010, p2).*

In 2011, the IUP read:

> *On August 30, 2010 the NYS Environmental Conservation Law was amended to include the Smart Growth Public Infrastructure Policy Act. The NYSDOH and the EFC are working to ensure full compliance. Federal rules require that the scoring criteria for the DWSRF program be based primarily on public health priorities. The DWSRF program is in place to assist in the protection of the public health of all New York communities that qualify for financing (DOH and EFC, 2011, p2).*

In 2012, the IUP language became even clearer:

> *On August 30, 2010 the New York State Environmental Conservation Law was amended to add the State Smart Growth Public Infrastructure Policy Act. This law requires that starting September 27th, 2010, any new or expanded public infrastructure project receiving financing from a state infrastructure agency must be consistent with the relevant Smart Growth public infrastructure criteria as they are defined in the law to the extent practicable. DOH will now require, as a part of the engineers report and/or through other DWSRF application materials that may be developed, an analysis of each project with respect to its compliance with the criteria of the Smart Growth law (DOH and EFC, 2012, p2).*

In the 2013 and 2014 IUPs, the language became unambiguous and was moved to the front cover: "Projects funded through the DWSRF are subject to… the State Smart Growth Public Infrastructure Policy Act" (DOH and EFC, 2013a, np).

In 2014, the DOH began to require that applicants complete a screening form before they apply for DWSRF funds. This pre-application holds project leaders (such as local elected officials, water authorities, and private contractors) responsible for completing more of the documentation themselves, with the goal of increasing

applicants' awareness and understanding of relevant laws and requirements. The DOH will provide support as necessary and review the documents provided. The DOH may suggest that the applicant make changes to the project to ensure it is more compliant with the SGPIPA criteria and, in turn, more competitive. For example, in certain circumstances, a suggested change may be to resize the project to serve just the current population (Montysko, personal communication, 2013). This exemplifies how SGPIPA affects municipalities, even though it does not directly apply to them.

The Smart Growth Committee

As noted in the introduction to this report, NYS agencies funding infrastructure are required by SGPIPA to develop a Smart Growth Committee to "advise the agency regarding the agencies' policies, programs and projects with regard to their compliance with the state Smart Growth public infrastructure criteria" (SGPIPA, 2010, np). Furthermore, in cooperation with the committee, the head of that agency must sign a written Smart Growth Impact Statement (SGIS) attesting that given projects meet the relevant criteria "to the extent practicable" (SGPIPA, 2010, np) or, in a justification statement, detail why meeting the criteria or complying more generally is impracticable. Because the EFC was established by state law to administer the financial aspects of the Clean Water and Drinking Water State Revolving Funds and because it is specifically listed in the Smart Growth Public Infrastructure Policy Act as an agency subject to the law, it is the agency required to sign the Smart Growth attestation for both programs. It has created a Smart Growth Committee and works with DOH on DWSRF projects to evaluate particular projects' compliance with SGPIPA principles.

In the remainder of this report, we focus on the how the EFC and DOH comply with the second core requirement of SGPIPA, the attestation that a project complies with SGPIPA principles. We focus on this aspect of the agencies' compliance with SGPIPA because it is through the information gleaned for the attestation that municipalities and other program applicants seeking to fund sewer and water infrastructure are impacted by the law in practice. To this end, we describe how the process through which sewer and water infrastructure projects are assessed with respect to compliance with SGPIPA criteria and, in turn, required to comply with those principles to the extent practicable to be eligible to receive funding.

The Smart Growth Assessment

Because the EFC is involved with the administration of both the CWSRF and the DWSRF, it should come as no surprise that the way in which both funding programs have implemented Smart Growth Assessment is essentially the same, with a couple of notable differences. The Smart Growth assessment process for both programs starts with the program application process, during which the agencies gather the information needed to complete the assessment and ends with the assessment of this information, once a project has been determined eligible for funding in the next financing period. The application process for both programs involves two major steps, which are outlined on the EFC website and summarized below: (1) a shorter pre-application or "Project Listing Form" and (2) a longer, more detailed Financing Application.[4]

The Project Listing Form

Information on the project listing form is used by the agencies (the DOH for the DWSRF and the EFC for the CWSRF) to score and rank the project for funding. DWSRF projects are ranked relative to five criteria: treatment technique violations, sanitary code violations, system reliability and dependability problems, governmental needs and financial needs. CWSRF projects are ranked relative to the Project Priority System (PPS) defined by DEC regulations: 6 NYCRR Part 649 (EFC 2014f, p.C-1):

- The existing source of pollution causing the water quality problem which may be resolved by the project.
- The potential water quality improvement due to the project.
- Consistency with management plans.
- Intergovernmental needs.
- Financial need (municipal projects only).

[4] The DWSRF application process may be accessed online at: http://www.efc.ny.gov/Default.aspx?tabid=103. The CWSRF application process may be accessed online at: http://www.efc.ny.gov/Default.aspx?tabid=111

•Economic need (EFC 2014f, p.C-2).

Once scored, a project is put into the respective agency's Intended Use Plan (which essentially documents the projects that were submitted for program funding in any given year). If the project is determined to be construction ready in the next financing period, it is placed on the Annual List (formerly known as the Project Readiness List) where it is ranked by its score; projects not yet ready for funding are placed on the Multi-Year List of the IUP. Depending upon the federal funds allocated to the program in that year, those ranked highest are eligible for subsidized funding; those not eligible for subsidized funding are eligible for non-subsidized funding and may be eligible for subsidized funding if the higher ranked projects don't use all of the funds. This ranking process is particularly important for DWSRF projects because the program receives more applications in any given year than it has funds to accommodate. In contrast, in recent years the CWSRF program has been able to fund just about every project that is ready to go (Macri, 2014).

For the CWSRF, the project listing form includes a "State Smart Growth Public Infrastructure Policy Act Acknowledgement" section that states that "CWSRF financings are subject to the State Smart Growth Public Infrastructure Policy Act" and that "as set forth in the Act, EFC is required to determine that each project that includes the construction of new or expanded public infrastructure is consistent with the relevant Smart Growth criteria to the extent practicable." As part of completing the project listing form, this section requires an applicant to acknowledge that they "need to demonstrate that projects meet the [CWSRF relevant] criteria in the Smart Growth Assessment" (CWSRF Project Listing Form).

The language used in this section is both important and interesting. It is important in that it puts a program applicant on notice that compliance with Smart Growth principles to the extent practicable is important and a required consideration in the funding process. It is interesting because it requires an applicant to acknowledge that they need to demonstrate that the project meets the specific (program relevant) Smart Growth criteria, when the law requires them to meet Smart Growth criteria only *to the extent practicable*.

Unlike the CWSRF project listing form, DWSRF Project Listing form does not include a SGPIPA Acknowledgement requirement, nor is there any reference to Smart Growth within the DWSRF Project Listing form. However the DWSRF Final IUP includes a copy of the DWSRF Smart Growth Impact Assessment which states that it "must be submitted with all new listings forms" (DOH and EFC, 2014).

Both the DWSRF and CWSRF require applicants to complete and submit a Smart Growth Assessment form along with their Project Listing form.[5] Guidance for completing this form for CWSRF projects is provided on the EFC website.[6] For DWSRF projects, this requirement is stated on the cover page that accompanies the DWSRF Listing Form and Smart Growth Assessment Checklist: "The Smart Growth Assessment Checklist must be completed and submitted along with the Listing Form for projects to be added to the IUP." (DOH and EFC 2015, Attachment IV)

Although the applicant's response to the Smart Growth Assessment form plays no role in scoring the project or its rankings on the IUP list, the information is taken into consideration by respective agency staff as part of the technical review process. It is the intent of the respective agencies that their project reviewers (engineers) work with the project applicants to ensure that a project is well-designed, including the incorporation of Smart Growth principles, to the extent practicable.

The Project Application

Once a project is placed on the CWSRF or DWSRF's Project Readiness List, the applicant may complete the second part of the application process, the Financing Application. The Financing Application essentially provides the EFC with the information they need to determine the amount of funding required to support a

[5] See Appendix.
[6] See: Clean Water State Revolving Fund Smart Growth Review. http://www.efc.ny.gov/Default.aspx?tabid=474 Accessed: 08/01/14.

project and develop and administer the funding package.

Before the financial package is awarded a project is assessed for compliance with SGPIPA criteria. A Smart Growth Impact assessment is completed by the EFC, documenting the outcome of the Smart Growth assessment. While the final Smart Growth Impact Assessment is completed by the EFC, the DOH completes an initial review of a DWSRF project's compliance with SGPIPA and forwards its assessment on to the EFC which uses that information to complete a final evaluation via the Smart Growth Impact statement. If a project has complied with SGPIPA principles to the extent practicable, and all other financing requirements have been fulfilled, the EFC may then sign a financing agreement with the applicant.

It is noteworthy that by the time a project reaches the stage of being approved for funding, the agencies are very familiar with the project. However, the Smart Growth Assessment forms completed by applicants ensure the information required is complete and formally documented. The forms are also seen as an important tool to help applicants understand the importance of developing infrastructure that is compliant with Smart Growth principles. Each agency's understanding of the project, particularly with respect to compliance with SGPIPA, speaks to the level of oversight administered by each agency throughout the process and their intent to encourage the inclusion of Smart Growth principles as early as possible in the project design process (Montysko, 2014).

Differences in the CWSRF and DWSRF Application Process Relative to SGPIPA

In addition to not including a reference to SGPIPA or Smart Growth in its Project Listing form, the DWSRF makes no immediate reference to either Smart Growth or SGPIPA on the on its website. In contrast, the EFC's obligations under SGPIPA are visibly highlighted on the CWSRF program website, along with the documentation required of program applicants by EFC so that they can comply with those obligations. This may be due to the fact that while the CWSRF can fund projects of a proactive nature, most of DOH's are remedial in nature, that is, they are addressing a threat to public health, such as wastewater overflow. As such, while Smart Growth principles are important to the agency because its charge is to provide for public health, a project may be funded whether or not it is Smart Growth compliant, so long as there are no other cost-effective options that will secure public health.

The Smart Growth Assessment Form and Impact Statement

As the crux of SGPIPA implementation on a day-to-day basis, it is helpful to consider the Smart Growth Assessment form and Smart Growth Impact Statement in detail. As described above, the SGPIPA mandates that the state agencies prepare a Smart Growth Impact Statement (SGIS) for every project. For both the CWSRF and DWSRF the SGIS is based on information provided by an applicant in a Smart Growth Assessment form. The EFC and DOH Smart Growth Assessment form both include a checklist of the Smart Growth criteria named in the SGPIPA, and questions about how those criteria are being implemented. There are five parts to each form, including three "Sections":

- An identifying section, including the applicant name, project number (if already listed), project summary, and project description.

Section 1- Screening Questions. There are three types of screening questions. The first is designed to determine whether or not the project is required to undergo a Smart Growth assessment and, if so, if one has already been completed before. The first screening questions require the applicant to indicate whether or not the project has been previously approved for financing, and if so, whether the project scope remains substantially the same. If these conditions hold, the project is exempt from further Smart Growth assessment. Exemption pertains because the project was either reviewed prior to 2010, meaning it is grandfathered from SGPIPA compliance, or it was reviewed after 2010, meaning it has already undergone a SGPIPA compliance assessment. So long as the project is not significantly different, it requires no further review. If it is significantly different, further review is required.

The second type of screening question is designed to assess whether or not the project involves new or expanded infrastructure (e.g., new water mains, a new treatment system or increased capacity in an existing system, or an increase in permitted water withdrawals from existing water sources). If the answer to all of these questions is no and the project effectively involves the maintenance or improvement of existing infrastructure, then SGPIPA does not apply. If, on the other hand, new or expanded infrastructure is involved, the applicant must complete the remainder of the form. The third asks whether or not the project is required by court or administrative order. While projects that are required by court or administrative order are subject to SGPIPA review, knowing that they are required is important to the evaluation and assessment of the degree to which SGPIPA compliance is practicable.

Section 2 – Additional information Needed for Relevant Smart Growth Criteria for [the respective fund's] Project. If responses to the screening questions determine that a project is subject to SGPIPA compliance review (meaning, essentially, that it involves new or expanded infrastructure), the applicant must complete Sections 2 and 3. Section 2 requires that an applicant address its compliance with all other Smart Growth criteria articulated in SGPIPA that the respective agencies deem relevant to their programs. For both the CWSRF and the DWSRF, this includes four criteria:

(1) The use or improvement of existing infrastructure
(2) Service of a municipal center
(3) Community-based planning
(4) Sustainable development

From the perspective of the agencies, not all of SGPIPA's other criteria (e.g.: transportation) are relevant to the infrastructure supported through their programs.

Section 3: Additional Information - The additional information requested involves three questions, with the option to respond "yes" or "no" with an explanation for the first two.

(1) Does the project include measures that exceed required natural resource protections
(2) Does the project support Smart Growth planning and design principles
These two questions provide the agencies with a greater level of detail about the nature of the project relative to SGPIPA compliance and intent to incorporate Smart Growth principles. For example, the CWSRF process requires a State Environmental Quality Review SEQR) so the question about natural resource protection gets at whether the project goes above and beyond SEQR requirements.
(3) Other agencies to which the applicant has applied for funds to support the project. The third question is asked because all agencies which fund infrastructure development must complete a Smart Growth review prior to the funding the project.

The last section is one that requires the person completing the form to sign it, including their name, title, and date. For the CWSRF this section also includes a statement that the preparer signs off on with his/her signature, indicating that the person is authorized to act on behalf of the applicant and that the information included in the Smart Growth Assessment is true.

Again the DOH and EFC use the information provided in the Smart Growth Assessment form by applicants to determine (1) whether or not a project is subject to SGPIPA; and, if it is (2) whether or not if complies with Smart Growth principles; and (3) if it does not fully comply with Smart Growth Principles, if it has done so to the extent practicable. Only those projects which are deemed to comply with SGPIPA to the extent practicable can be funded. However, both agencies note that by the time a project gets to the point of SGPIPA review, agency staff has worked with them to ensure that Smart Growth principles have been incorporated to the extent possible.

In the following section, we describe the review process and Smart Growth impact statement for both programs, using examples of Smart Growth impact statements provided by EFC and DOH.

Water and sewer infrastructure projects reviewed under SGPIPA

Both the EFC and the DOH provided examples of SGISs in several categories. Some met the SGPIPA Smart Growth criteria. Some projects were in effect grandfathered in due to the timing of review relative to the adoption of the law. For others, review was deemed unnecessary because they were not "construction of new or expanded public infrastructure or the reconstruction thereof," as stipulated in the text of SGPIPA (2010, np). Finally, the EFC and the DOH provided examples of projects that have been "justified" since the passage of the SGPIPA in 2010. The basis for each category of examples is described below.

Projects not required to undergo a full review for their compliance with Smart Growth criteria fall into two categories: Those "previously approved" and those that are "not new or expanded". Projects that were "previously approved" were either awarded approval of financing or funding before the passage of SGPIPA in 2010 (and are grandfathered with respect to the law) or, if approved since the law came into effect, have already undergone a SGPIPA review. In either case, as long as they are not substantially different in scope than when they were first approved, they require no further SGPIPA compliance review. The "not new or expanded" category refers to those projects that do not involve the construction of new or expansion of existing infrastructure. SGPIPA only applies to "new or expanded public infrastructure or the reconstruction thereof" (SIGPIPA, 2010, np).

In brief, meeting the SGPIPA criteria means that a project complies with the SGPIPA criteria deemed relevant to the respective infrastructure funding program (i.e.: CWSRF or DWSRF). As stated above, a project must use or improve on existing infrastructure, serve a municipal area, involve community-based planning, and make use of practices for sustainable development. It is also important that a project coordinate among state, regional, and local government and planning officials, and comply with local building and land use codes. Appropriately, the location of a proposed facility in a municipal center emerges as perhaps the most significant factor in determining whether or not a proposal meets the Smart Growth criteria. However, municipal center location is only one of the criteria listed in the law. While some criteria (e.g. providing mobility through transportation choices) are deemed irrelevant to typical water and sewer infrastructure decisions by the EFC and DOH, it is not always clear in the reviews that cite municipal center location in the determination if, how, or why the project is consistent with the other relevant criteria.

The most revealing category of funded projects is made up of those projects deemed "justified" – that is, they do not meet the SGPIPA relevant criteria, but are nonetheless being approved for financing or funding. The grounds on which these projects are justified are explored in detail below. In short, water and sewer projects are typically justified for the urgent protection or promotion of health and/or the environment, meaning that remedying existing conditions which threaten human and environmental health is seen is a higher immediate or short term priority than Smart Growth compliance.

The numbers of justified projects for both agencies are quite small, on the order of just a few each year. Through the pre-application process described above, EFC personnel work with CWSRF applicants to guide the development of projects, including the incorporation of Smart Growth principles. As such, the need for justifications is minimized, if not entirely negated, for new projects.

In the following sections, we provide examples of Smart Growth reviews of CWSRF projects as organized by the category of the final determinations. We have not researched the facts supporting these determinations, and so make no independent critique or endorsement of their soundness.

Clean Water State Revolving Fund (CWSRF) Smart Growth reviews

CWSRF projects found to be "Previously approved"

The EFC's CWSRF Smart Growth Project Review Checklist begins by screening projects, asking if the projects have received prior approval and if the scope of the project is "substantially the same as was approved" (2013). Projects that were approved before 2010 do not need to meet SGPIPA criteria. An example of these projects is the **Newtown Creek water pollution control plant upgrade**, 2003-2009. The plant is being upgraded to meet the 1972 federal Clean Water Act, based on a case filed by the Supreme Court of the State of New York – Kings County – in June of 2002.

CWSRF projects found to involve "no new or expanded" infrastructure

Projects that simply involve repair and rehabilitation of existing infrastructure are not covered by SGPIPA, since the Act only covers the "construction of new or expanded public infrastructure or the reconstruction thereof" (SGPIPA, 2010, np). Neither of the two following projects requires the addition of new or expanded infrastructure with the water treatment systems involved, therefore they have limited or no influence over the potential for new growth and development.

The **Oneida County inflow & infiltration correction project** was required by a consent order by the NYS Department of Environmental Conservation (DEC) because of sewer overflows at a pumping station. Under the proposal the County would repair manholes and rehabilitate sewers within each of the contributing municipalities to reduce the overflows at the pumping station. The financing would also support ongoing inspections and maintenance. Crucially, the Final Draft EFC SRF Smart Growth Project Review Checklist notes, "The project will not result in an expansion of the capacity of the treatment system nor addition of new service connections" and further, "any additional phases of this project must be reviewed by the Smart Growth Committee" (EFC CWSRF Project No. C6-6070-08-00, 2011, p1).

Another example of a "not new or expanded" project is the **Owls Head Water Pollution Control Plant improvement project** financed by the New York City Municipal Water Finance Authority in Kings County. This project proposed to replace diesel fuel with natural gas and reduce electricity consumption at the plant by up to 60%. The project is listed in the "Green Project Reserve" because it meets EPA criteria for energy and water conservation. On the Final Draft ERC SRF Smart Growth Project Review Checklist it states that the project "advances or otherwise uses, maintains or improves existing infrastructure" and that the "project does not increase the volume or treatment capacity of the facility or system" (EFC CWSRF Project No. C2-5227-20-00).

CWSRF projects found to "meet SGPIPA criteria"

EFC's Smart Growth Impact Statements for projects that meet CWSRF relevant SGPIPA criteria indicate, quite simply, that they have been determined to meet the SGPIPA criteria. No justification statement or further explanation is required. An example of a CWSRF project that was determined to be "consistent with the relevant Smart Growth Criteria" is the **Harbor Brook Combined Sewer Overflow abatement project.** The primary purpose of the project is to protect public health and water quality. The project proposal entails constructing a facility to store stormwater runoff until it can be returned to an existing sewer treatment plant for full treatment. The project is the result of a binding judgment and consent order that required Onondaga County to construct a "gray water" infrastructure project to prevent sewer overflows that were discharging, untreated, into Onondaga Lake. "Gray infrastructure" refers to conventional management practices for stormwater and wastewater treatment, e.g., traditional use of pipes and sewers. Because there is no explanation for the determination, one must surmise the grounds on which this decision is based, but a review of the EFC SRF Smart Growth Checklist for the project (C7-6320-12-01) documents that the project meets SGPIPA requirements on several grounds, as it:

- advances or otherwise uses, maintains or improves existing infrastructure;
- involves new capacity but does so to remedy sewage overflow that is contaminating a lake;
- is located in a municipal center;
- involves the preservation and enhancement of the state's resources;
- fosters mixed land use;
- involved coordination among state, regional, and local planning and governmental officials;

• involved community-based planning and collaboration;
• is consistent with local building and land use codes;
• and is specifically required by a court order

In other words, it meets most of the criteria identified on the instrument used to assess SGPIPA compliance at the time (ERC SRF Smart Growth Checklist February 17, 2011 DRAFT REVISION)

CWSRF projects found to be "justified" despite failure to meet Smart Growth criteria

As described above, the SGPIPA does not require that every project comply with all of the criteria listed; agencies can determine that a project should be funded if it complies with the relevant criteria "to the extent practicable" or that it is impracticable to comply with the relevant criteria (SGPIPA, 2010, np). To address a project that "does not meet such criteria or [for which] compliance is considered to be impracticable", SGPIPA requires that the reviewing agency detail why meeting the criteria is impracticable in a statement of justification (2010, np).

The EFC provided five examples (though two are related) of clean water projects "justified" for financing or funding despite not meeting SGPIPA criteria. For these five projects, full compliance with Smart Growth principles was considered "impracticable": Cayuga County East Bay phase 2 and phase 4, the Lime Lake sewer system, Whispering Oaks Sewer District improvements and the Caughdenoy sewer improvement project. Together, these are examples of the EFC's "justified" projects between the passage of SGPIPA and June 2013.

The **Cayuga County East Bay phase 2** and **phase 4** projects near Lake Ontario establish a new sewer district to replace failing individual on-site septic systems, following a consent order by the NYS Department of Environmental Conservation. (Final Draft EFC SRF Smart Growth Project Review Checklist, Project No. C7-6235-02-00, p.1). The EFC's Smart Growth Advisory Committee determined that while the project does not wholly serve a municipal center, it is "expected to remedy existing threats to human health and the environment by eliminating aging septic systems [and] has been designed in a manner that limits additional connection and capacity" (Statement of Justification for Cayuga County Water and Sewer Authority (Cayuga WSA) C7-6235-02-00 STF/PF/SMRF, np).

Two key grounds for this justification seem to be a) the expectation that the projects will remedy threats to health and b) that it does not include excess capacity for future growth, meaning it is not designed in a way to promote sprawl. These themes are echoed in the other justifications.

Thus, the Committee evaluated the new **Lime Lake sewer system** in the Town of Machias in Cattaraugus County. In this case, existing septic systems were failing, leading to pollution of Lime Lake. The sewer system could be employed to serve this existing residential and commercial development without the need to increase its overall volume or treatment capacity as a nearby pump station and treatment plant were large enough to accommodate the additional flow. Although there was no consent order requiring action and the project is not located in a municipal center, the EFC's Smart Growth Advisory Committee determined that the project is expected to "remedy existing threats to human health and the environment by eliminating failing on-site septic systems" (Statement of Justification for Machias (T) C9-6619-01-00, 2011, np). Further, the sewer district extension was determined to be designed in a way that would limit additional flow by using a water main with a "small diameter" (Statement of Justification for Machias (T) C9-6619-01-00, 2011, np).

The Whispering Oaks Sewer District improvements project in the Town of Lysander, near the Seneca River, proposed an extension of the sewer district, with a new distribution system. The existing community septic system, according to the justification statement, is "in bad repair and is experiencing frequent failures and sewage breakthrough events which are impacting groundwater and the Seneca River" (Statement of Justification for Lysander (T) C7-6343-01-00 STIFF and SMRF np). Following a Consent Order, the failing system was to be abandoned and new infrastructure provided for collection and conveyance of sewage to a nearby wastewater treatment plant. This project had

been listed on the Clean Water State Revolving Fund Final IUPs at least since 2010, the year SGPIPA was passed. As in the other cases, the project is not located in a municipal area. However, the Smart Growth Advisory Committee states, "The project has been designed in a manner that limits additional connections and capacity" and further, that the project was "expected to remedy the existing threats to human health and the environment by eliminating the community septic system that is in bad repair and causing grey water outbreaks"" (Statement of Justification for Lysander (T) .C7-6343-01-00 STIFF and SMRF, np).

Finally, the **Caughdenoy sewer improvement project** seeks to replace a community sewer treatment system experiencing seasonal failure with a new pump station and five miles of piping to collect and pump sewage to a nearby wastewater treatment plant. In addition, the project proposed to upgrade an existing pump station and improve energy efficiency. The upgrade was designed to serve existing residential and commercial parcels currently dependent on on-site septic systems, but was not designed to accommodate new development. It is located in a municipal area, but not specifically required by court order or an administrative consent order. The Smart Growth review committee determined:

> *The area that the sewer district extension serves is not located in a municipal center and thus the project does not meet the municipal center criterion. However because the project is expected to remedy existing threats to human health and the environment by eliminating the sand filter system that is in bad repair and the aging septic systems and the project has been designed in a manner that limits additional connections and capacity, compliance with the relevant criterion for a municipal center of the Act is considered to be impracticable. (Statement of Justification for Hastings (T) C7-6352-05-00 SMRF, np)*

To summarize, in total, there are very few CWSRF justification statements. All of them seek to remedy situations harmful to either human or environmental health, and the justifications state that each is explicitly designed in such a way as to limit the acceptance of additional flow in the future. Thus, while the projects do not meet SGPIPA requirements, they take a growth limited approach to the extent practicable relative to the public health and environmental protection missions served by the sponsoring agencies.

Drinking Water State Revolving Fund (DWSRF) Smart Growth reviews

DWSRF projects found to be "Previously approved"
The DWSRF begins by screening projects, asking if the projects have received prior approval and if the scope of the project is "substantially the same as that which was approved" (DOH DWSRF Project No. 17201, 2013, p1). Providing that the project is substantially the same as what was approved prior to the implementation of SGPIPA, the project is not required to meet SGPIPA criteria. An example of a project that was exempted from SGPIPA compliance review is the **installation of a new storage tank and distribution area in the Village of Ellisburg**. The project proposed to replace private wells of poor quality and quantity, and extend water service from the nearby Village of Mannsville. Because the project was originally financed in 2007, and the funds requested after the SGPIPA enactment would support the completion of the original project, SGPIPA review was not required.

Projects found to involve "no new or expanded" infrastructure
As noted above, SGPIPA is designed, in large part, to prevent state-sponsored sprawl. As such, it covers the "construction of new or expanded public infrastructure or the reconstruction thereof" but not projects that do not add to existing capacity, such as those that only involve the repair and rehabilitation of existing facilities (SGPIPA, 2010, np).

The DOH provided two examples of projects that would not create any new capacity: the **consolidation of three water systems in the Villages of Richburg and Bolivar**, **and the Town of Bolivar**, and a project to **upgrade the water treatment plant in the City of Rome**. The Richburg/Bolivar project entails improving the water source (a spring in Richburg), rehabilitating storage tanks, laying interconnecting piping, and replacing water mains. The treatment facilities would also be

replaced. In Rome, the project was a simple improvement to the filters at the city's existing water filtration plant.

Projects found to "meet SGPIPA criteria"
The DOH's Smart Growth Impact Statements for projects that meet SGPIPA criteria, like EFC's for projects in the same category, do not require any sort of justification or further explanation. Rather they indicate, simply, that they meet the SGPIPA criteria. The following two projects are examples of such projects.

The project to **consolidate the water systems of the Villages of Herrings and Deferiet** proposed to upgrade the system by replacing storage tanks, distribution lines and meters, and to extend service to eight properties with contaminated private wells (DWSRF Project No. 17562). The SGPIPA criteria the project complies with include the following, as it:

• uses existing infrastructure (although water mains were to be expanded, the expansion was being done to serve existing homes with water sourced from existing wells)
• serves a municipal center (villages that received a "hardship commitment" from the DWSRF, for $2 million and a $1.5 million interest-free loan);
• involved public meetings.

A proposal to **install new groundwater sources in the Town of Essex** would allow the existing water treatment plant (treating water from Lake Champlain) to be abandoned or reused. The project also includes a new chlorination plant and an upgrade of the existing distribution system. Reasons cited in the Smart Growth Assessment (DWSRF Project No. 17629) that can be presumed to be the basis for the "meets criteria" determination include the following:

• Although a new treatment facility is being constructed, it is being used to replace an existing filter plant that "fails to provide adequate treatment" and although new wells are being constructed the existing water source is being abandoned and the draw on the new wells is expected to be the same or less than the draw on the original source (p1).
• Likewise, existing mains are being replaced but no new mains are being constructed (p1).
• The project involves the use of existing infrastructure (p2).
• While there has not been a court or consent order, the town has been cited with contamination violations (p2).
• The project serves a municipal center (a mainstreet and downtown area, that is also a Local Waterfront Revitalization Program Area), (p2)
• The project has also received DWSRF hardship status, with a $1 million grant and an approximately $300,000 interest-free loan (p3).
• Public meetings had been held to "solicit community input" (p3).
• Finally, further development is limited by the location of the town – within the Adirondack Park. As is noted in the SGIS, "[a]ny proposed future growth would be bound by [Adirondack Park Agency] regulations" (p4).

Like the CWSRF projects deemed to meet the SGPIPA criteria these DWSRF examples suggest that projects are deemed to meet criteria so long as they meet core SGPIPA criteria, such as providing for no new capacity by serving existing residential and business needs.

Projects found to be "justified" despite failure to meet Smart Growth criteria
As described above, the SGPIPA does not require that every project comply with all ten of the criteria listed; agencies can determine that a project should be funded if it complies with the program's relevant criteria "to the extent practicable" (SGPIPA, 2010, np). To address projects that do not meet the criteria and for which compliance is "impracticable", SGPIPA requires that the agencies detail why meeting the criteria is impracticable in a statement of justification. According to the DOH, because the DWSRF is primarily intended for repairing and rebuilding infrastructure (to remedy public health threats), most projects are exempt from SGPIPA review. However, in a few cases, these projects include extensions to existing systems and, because they involve new infrastructure thus, would not be in compliance with SGPIPA necessitating a justification for funding. The DOH provided two examples of drinking water projects that were not in compliance with SGPIPA but were approved for funding with a justification statement:

A proposal for new water storage and treatment facilities in the **Village of Cayuga and the Town of Aurelius**, along with a new water transmission main and piping for distribution, would connect the Village and the Town to the City of Auburn's water distribution system, replacing the existing source of Cayuga Lake and decommissioning the failing village-based system. This project would serve the Village of Cayuga, which by DWSRF standards is a "disadvantaged community" (although not technically a hardship/poverty area) and the project "support[s] Smart Growth planning and design principles [because] [e]xisting infrastructure is being replaced and/or rehabilitated" (DOH DWSRF Project No. 16114A and 16114B, 2013, p4). However, because it involves new infrastructure and a new service area within the town, the project does not comply with SGPIPA criteria. Community input was stated to have taken place during the SEQR review, which "invited all pertinent agencies and therefore their constituencies to comment" (DOH DWSRF Project No. 16114A and 16114B, 2013, p3). The project was justified on the grounds that it was being sized only for the existing population of the village and town, with minimum-sized mains. Furthermore, from a "public health perspective," the project was warranted because:

- The Village has serious public health violations including for potential carcinogens and inadequately treated surface water that cannot be corrected with their existing treatment plant.
- The footprint of the land that the Village owns is too small to accommodate the modern plant that would be required to meet standards.
- Rebuilding the existing village plant is unaffordable with a required new intake into the lake to replace the 75-year-old one that suffered a recent break.
- The Village does not have the managerial, technical, or financial capacity to operate and maintain a complex modern filtration/disinfection plant and would not comply with the federal requirements to receive DWSRF financing to correct their serious public health violations.
- The interconnection of the Village to the Town supports DOH's policy on public water system regionalization and where it is available required by the DWSRF program unless justification supporting the contrary is available.
- The interconnection of the Village to the Town supports the Governor's and the NYS Comptroller's shared services initiatives (DWSRF Project No. 16114A and 16114B).

In the other example, a **new distribution system and storage tank** will be built to serve an area in the Town of Louisville with "existing users that rely on private wells of insufficient quality and quantity," and consolidate some existing public water systems (Smart Growth Assessment DWSRF Project No. 17454, p1). The project proposes to create a new water district, with an additional intake, drawing on water from the Town of Louisville's water treatment plant, which treats water from the St. Lawrence River. The project is entirely located in two towns, Louisville and Norfolk. It has received a hardship determination, with $2 million in grant money and a $7 million no-interest loan. Expanding water to the Louisville homes in particular was a part of the Town's 2001 comprehensive plan. In response to the Smart Growth Assessment form instructions (3(a)), to "provide a description of the plan to solicit community input regarding the project," it is stated that "public meetings have been conducted" (DWSRF Project No. 17454, 2013, p.4). Although it is not clear from the justification statement whether the public meetings were conducted as part of the comprehensive plan development process or in relation to the project itself, according to DOH, there would have had to have been public meetings regarding the project in addition to those specific to the comprehensive plan

development process (Montysko 2014). The statement of justification cites a public health threat due to the private wells' quality (bacterial contamination, iron) and quantity (some wells going dry in the summer), with some residents relying on bottled water. Furthermore, it notes, the project has been sized and located to serve only existing residences and businesses, and that "the new water district consolidates several regulated water supplies in the project area" (New York State Environmental Facilities Corporation State Smart Growth Public Infrastructure Policy Act Statement of Justification for Louisville (T) D0-17454, np).

Discussion

Overall, it is clear that both DOH and EFC, the two most important NYS funders of water and sewer infrastructure projects, have taken the responsibility of implementing SGPIPA quite seriously, especially in relation to some other state infrastructure agencies that have made less effort (Empire State Future, 2014). It is perhaps worth noting that the broad mission of the EFC, with its concerns about environmental protection and sustainable growth, aligns well with the sustainability, environmental and land use planning goals that are a central element of SGPIPA:

> *Our mission is to provide low-cost capital and expert technical assistance for environmental projects in New York State. Our purpose is to help public and private entities comply with federal and State environmental protection and quality requirements in a cost effective manner that advances sustainable growth. We promote innovative environmental technologies and practices in all of our programs. (EFC, 2014a)*

With at least a significant contrast of emphasis, the DOH mission to "protect, improve and promote the health, productivity and well-being of all New Yorkers" (https://www.health.ny.gov/commissioner/mvv.htm) points to different priorities, even if these do not inherently conflict with SGPIPA. This difference is manifest in the subset of Smart Growth Impact Statements that highlight the need to provide clean water to healthy consumers as an overriding justification.

As just noted, human health concerns are central to the several statements of justification summarized above. In other words, the priority of human health justifies projects even if they do not meet some of the Smart Growth Public Infrastructure Policy Act (SGPIPA) criteria. This is not strictly an exercise of discretion. In some cases, a court has ordered the project to be undertaken in order that the water supply system comply with legislative standards such as those set by the 1972 federal Clean Water Act. The SGPIPA itself includes the proviso that, "Nothing in this section [which lists Smart Growth criteria] shall contravene any federal law governing the expenditure of disbursement of federal infrastructure funding administered by the state" (SGPIPA, 2010). More generally, public health and safety concerns are at the core of the mandate of the Department of Health, as is to some extent also true for the State building code, and these concerns clearly condition the extent to which strict adherence to the SGPIPA criteria is judged to be "practicable".

The same Smart Growth criteria (from SGPIPA) are used to review both clean water projects (i.e., projects for wastewater treatment) and drinking water projects, though their implications for Smart Growth can differ. For wastewater, on-site treatment is often the most feasible design alternative and when sewers are needed to replace failing on-site systems, the engineering design can restrict the capacity for additional users. The need for new drinking water systems is mostly driven by contaminated or dry wells. The public health policy for New York State is to provide safe clean drinking water to all residents. Furthermore, the codes and regulations require additional capacity for fire suppression and redundancy for adequate back-up supply systems. Therefore, in order to protect public health and to meet the required standards for water supply and fire suppression, water may be distributed from an existing supply or new supply to existing residents in suburban or rural settings which do not meet the criteria for a municipal center.

Water and Sewer Infrastructure and Smart Growth

This observation raises other questions about the relationship between water infrastructure, sewer infrastructure and development. How much might responding to short-term needs for clean water increase the probability over time that public sewerage will also be provided and the costs of development significantly reduced? How effective are decentralized, smaller-scale systems at providing clean water without incentivizing sprawl? More generally, where safe drinking water must be provided, how effective are capacity restrictions, engineering design, or concurrent land use policies as growth controls in practice? Indeed, what exactly is the relationship between water and/or sewer infrastructure and development or sprawl?

There can be complexities in answering these questions in the context of various degrees of development pressure within and outside of existing developed areas. DOH staff observed with regard to one of the fastest-growing counties in the state that has little public water infrastructure, that while on the one hand providing access to public water outside of municipal centers may induce sprawl, -sprawl frequently exists without it. Moreover, public water systems can sometimes serve as a tool for limiting scattered rural sprawl because they do away with the need for the larger lot sizes required for individual wells and septic systems. As such, public water can result in favorable Smart Growth outcomes such as more compact development, the protection of open spaces and improved quality of life and public health, all at a lower cost than individual wells and septic systems. The outcome in particular cases, of course, depends on existing development patterns and development pressures in relation to local land use controls and zoning (Montysko 2013).

Comprehensive and Community-based Planning

Although not necessarily highlighted in the discussion to this point, the Smart Growth Public Infrastructure Policy Act (SGPIPA) is greatly dependent on the quality of local planning. Three of the ten Smart Growth criteria articulated in the law explicitly mention municipal or community-based land use planning. The Smart Growth Assessment form for both the CWSRF and DWSRF requires the applicant to "provide a description of the plan to solicit community input regarding the project" and to indicate if a project affects an Environmental Justice Area." If an environmental justice area is impacted, the applicant must also explain the community will be engaged "in planning for the project" (EFC, 2013b and DOH & EFC, 2013a). As for other criteria in the SGPIPA, it is unclear whether only one of these suffices, or if a certain number must be met. In most justification statements, at least four or five of these different avenues of community-based planning and collaboration are checked off.

This attention given to planning is not least an acknowledgment that in New York --as a home rule state -- the locus of control for land use planning is overwhelmingly vested in the State's municipal governments. Though state-funded infrastructure can in practice work for or against local efforts at sensible land use planning, it is primarily the responsibility of local officials to plan for community well-being by keeping downtowns and municipal centers vibrant, managing sprawl, and attracting people and capital of all kinds. The State's ten-point formal definition of Smart Growth is relatively clearly articulated in broad strokes, but it leaves a great deal of room for interpretation. State agencies involved in Smart Growth Impact Statement reviews are unlikely to argue that a locally approved comprehensive plan that designates a given area for more intensive development does not measure up the State's generalized standards for Smart Growth.

References

2013 Available CFA Resources. http://regionalcouncils.ny.gov/sites/default/files/documents/2013/resources_available_2013.pdf Accessed 12/9/2013.

DEC (Department of Environmental Conservation). 2013. SEQR: Environmental Impact Assessment in New York State. http://www.dec.ny.gov/permits/357.html Accessed 12/2/2013.

DEC (NYS Department of Environmental Conservation) and EPA (U.S. Environmental Protection Agency). December 2006. Amended and Restated Operating Agreement for the Organization and Administration of

the New York State Clean Water State Revolving Fund. http://www.riverkeeper.org/wp-content/uploads/2014/06/Operating-Agreement-Between-EPA-and-NYSDEC-Dec-2006.pdf Accessed: 10/14/14.

DOH (New York State Department of Health). 2008. Drinking Water Infrastructure Needs of New York State. http://www.health.ny.gov/environmental/water/drinking/docs/infrastructure_needs.pdf Accessed 12/02/2013.

DOH (New York State Department of Health). 2011. Drinking Water State Revolving Fund. http://www.health.ny.gov/environmental/water/drinking/water.htm Accessed 12/02/2013.

DOH (New York State Department of Health). 2012. Mission, Vision, Values. http://www.health.ny.gov/commissioner/mvv.htm Accessed 11/25/13.

DOH (New York State Department of Health). 2013. DWSRF Project No. 17562, (V) Deferiet.

DOH (New York State Department of Health). 2013. DWSRF Project No. 17629, (T) Essex.

DOH (New York State Department of Health). 2013. DWSRF Project No. 16114A and 16114B, (V) Cayuga and (T) Aurelius.

DOH (New York State Department of Health). 2013. DWSRF Project No. 17454, (T) Louisville.

DOH (New York State Department of Health). 2013. DWSRF Project No. 17201, (V) Ellisburg.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities Corporation). 2009. Final Intended Use Plan Drinking Water State Revolving Fund, October 1, 2009 - September 30, 2010. http://www.efc.ny.gov/Default.aspx?tabid=108 Accessed 11/25/13.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities Corporation). 2010. Final Intended Use Plan Drinking Water State Revolving Fund, October 1, 2010 - September 30, 2011. http://www.efc.ny.gov/Default.aspx?tabid=108 Accessed 11/25/13.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities Corporation). 2011. Final Intended Use Plan Drinking Water State Revolving Fund, October 1, 2011 - September 30, 2012. http://www.efc.ny.gov/Default.aspx?tabid=108 Accessed 11/25/13.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities Corporation). 2012. Final Intended Use Plan Drinking Water State Revolving Fund, October 1, 2012 - September 30, 2013. http://www.efc.ny.gov/Default.aspx?tabid=108 Accessed 11/25/13.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities Corporation). 2013a. Final Intended Use Plan Drinking Water State Revolving Fund, October 1, 2013 - September 30, 2014. http://www.efc.ny.gov/Default.aspx?tabid=108 Accessed 11/25/13.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities Corporation). 2013b. Smart Growth Assessment New York State Drinking Water State Revolving Fund (DWSRF), Revised May 15, 2013.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities Corporation). 2014. Final Intended Use Plan Drinking Water State Revolving Fund, October 1, 2013 - September 30, 2014. http://www.efc.ny.gov/Default.aspx?tabid=108 Accessed 11/25/13.

DOH and EFC (New York State Department of Health and the New York State Environmental Facilities

Corporation). 2015. Final Intended Use Plan Drinking Water State Revolving Fund, October 1, 2014 - September 30, 2015. http://www.efc.ny.gov/Default.aspx?tabid=108 Accessed 10/14/14.

EFC (New York State Environmental Facilities Corporation). 2013a. Smart Growth Assessment New York State Clean Water State Revolving Fund (CWSRF). http://www.efc.ny.gov/Default.aspx?TabID=76&fid=436 Accessed 11/25/13.

EFC (New York State Environmental Facilities Corporation). 2013b. Clean Water State Revolving Fund. http://www.efc.ny.gov/Default.aspx?tabid=82 Accessed 12/02/2013.

EFC (New York State Environmental Facilities Corporation). 2013c. Overview. http://www.nysefc.org/ Accessed 12/01/2013.

EFC (New York State Environmental Facilities Corporation). 2014a. About Us. http://www.efc.ny.gov/Default.aspx?tabid=94 Accessed 08/03/14.

EFC (New York State Environmental Facilities Corporation). 2014b. Clean Water State Revolving Fund. http://www.efc.ny.gov/Default.aspx?tabid=82 Accessed 08/04/2014.

EFC (New York State Environmental Facilities Corporation). 2014c. Draft Intended Use Plan Clean Water State Revolving Fund for Water Pollution Control October 1, 2013-September 30, 2014. Amendment No. 2. http://www.efc.ny.gov/Default.aspx?tabid=112 Accessed: 08/19/14.

EFC (New York State Environmental Facilities Corporation). 2014d. Drinking Water State Revolving Loan Fund. http://www.nysefc.org/Default.aspx?tabid=83 Accessed 05/07/14.

EFC (New York State Environmental Facilities Corporation). 2014e. Smart Growth Review. http://www.efc.ny.gov/Default.aspx?tabid=474 Accessed: 08/01/14.

EFC (New York State Environmental Facilities Corporation). 2014f. Final Intended Use Plan Clean Water State Revolving Fund for Water Pollution Control Federal Fiscal Year 2014 (Effective October 1, 2013-September 30, 2014). http://www.riverkeeper.org/wp-content/uploads/2009/06/Complete-CWSRF-2014-Final-IUP.pdf Accessed: 10/14/14.

EFC (New York State Environmental Facilities Corporation). 2014g. Finance. http://www.efc.ny.gov/Default.aspx?tabid=86 Accessed: 10/14/14.

EFC (New York State Environmental Facilities Corporation). 2011. CWSRF Project No. C7-6230-12-01, Onondaga County, Combined Sewer Overflow (CSO) Abatement Project Phase II – Lower Harbor Brook CSO Storage Facility and Conveyances, including Final Draft of EFC SRF Smart Growth Project Review Checklist (8/16/2011).

EFC (New York State Environmental Facilities Corporation). 2011. CWSRF Project No. C7-6235-02-00, Cayuga County Water and Sewer Authority, Cayuga County District No. 2 – Phase 2 West Bay Side Pressure Sewers and Phase 4 East Bay Side Collection System, including Final Drafts of EFC SRF Smart Growth Project Review Checklists (7/22/2011).

EFC (New York State Environmental Facilities Corporation). 2011. CWSRF Project No. C9-6619-01-00, Town of Machias, Cattaraugus County, Wastewater Collection System and Pump Station, Lime Lake Sewer District, including Final Draft of EFC SRF Smart Growth Project Review Checklist (7/22/2011).

EFC (New York State Environmental Facilities Corporation). 2011. CWSRF Project No. C7-6343-01-00, Onondaga County, the Town of Lysander Water District, Whispering Oaks Sewer District Improvements, including Final Draft of EFC SRF Smart Growth Project Review Checklist (7/22/2011).

EFC (New York State Environmental Facilities Corporation). 2011. CWSRF Project No. C6-6070-08-00,

Oneida County, I/I Correct (SSO) Phases 1 and 2A, including Final Draft of EFC SRF Smart Growth Project Review Checklist (4/26/2011).

EFC (New York State Environmental Facilities Corporation). 2011. CWSRF Project No. C2-5227-20-00, New York City Municipal Water Finance Authority, Kings County, NYCDEP Owls Head WPCP – Contract 85 and 84 (Improvements to Engines and Fuel Gas Systems), including Final Draft of EFC SRF Smart Growth Project Review Checklist 7/25/2011).

ESF (Empire State Futures). 2012. Agency/Authority Correspondence (Appendix to Smarter Growth: The Implementation of New York's Smart Growth Public Infrastructure Policy Act (PIPA)). http://www.empirestatefuture.org/resources/public-infrastructure-policy-act-implementation-report-june-2012/ Accessed 11/25/13.

ESF (Empire State Future).2014. The Smart Growth Public Infrastructure Policy Act Assessing its effectiveness three years after enactment. http://www.empirestatefuture.org/wp-content/uploads/SGPIPA01142014Final.pdf Accessed 08/18/14.

Frascarelli, Michael. 2010. Comments. In Salkin, Patricia. 2010. NY Enacts Smart Growth Public Infrastructure Policy Act. http://lawoftheland.wordpress.com/2010/10/25/ny-enacts-smart-growth-public-infrastructure-policy-act/ Accessed 12/2/2013.

Macri, Kathryn (Environmental Facilities Corporation, Division of Policy & Planning, Environmental Policy Coordinator). 2013. Personal communication with CaRDI staff.

Montysko, Michael (Department of Health, Bureau of Water Supply Protection, Design Section chief). 2013. Personal communication with CaRDI staff.

Montysko, Michael (Department of Health, Bureau of Water Supply Protection, Design Section chief). 2014. Personal communication with CaRDI staff.

OSC (Office of the New York State Comptroller, Division of Local Government Services and Economic Development). 2004. Smart Growth in New York State: A Discussion Paper. http://www.osc.state.ny.us/localgov/pubs/research/smart_growth.pdf Accessed 11/25 13.

Salkin, Patricia. 2010. NY Enacts Smart Growth Public Infrastructure Policy Act. http://lawoftheland.wordpress.com/2010/10/25/ny-enacts-smart-growth-public-infrastructure-policy-act/ Accessed 12/2/2013.

SGPIPA (State Smart Growth Public Infrastructure Policy Act). 2010. New York Environmental Conservation law (§§6-0101 - 6-0111). http://public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+&QUERYDATA=@SLENV0A6+&LIST=LAW+&BROWSER=BROWSER+&TOKEN=06349431+&TARGET=VIEW Accessed 11/25/13.

APPENDICES

APPENDIX A: CWSRF Project Listing Form – Smart Growth Acknowledgement section

State Smart Growth Public Infrastructu
Acknowledgement

CWSRF financings are subject to the State Smart Growth Public Infrastructure Policy Act. As set forth in the Act, EFC is required to determine that each project that includes the construction of new or expanded public infrastructure is consistent with the relevant smart growth criteria to the extent practicable. EFC has developed guidance for use by applicants that explains what is required by EFC to make this determination. In addition to information required elsewhere, Applicants will need to demonstrate that projects meet the following criteria in the Smart Growth Assessment:

1. Uses or Improves Existing Infrastructure -supports projects that improve existing infrastructure.
2. Serves a Municipal Center - advances development and re-development of existing centers of activity and land use.
3. Community-Based Planning - encourages projects that result from inclusive, bottom-up, stakeholder-driven planning processes where proper outreach has been conducted, particularly to underserved/under-represented environmental justice communities.
4. Sustainable Development - promotes projects that use existing resources in ways that do not compromise the needs of future generations, including: consideration and adoption, where appropriate, of green infrastructure techniques, decentralized infrastructure techniques and energy efficiency measures.

More information regarding EFC's smart growth review process (including the Act, Guidance for Applicants and Smart Growth Assessment) is available at http://www.efc.ny.gov/Default.aspx?tabid=474.

[ ] Please check this box to acknowledge that you are aware of this requirement and that you are authorized to make this acknowledgement on behalf of the applicant.

Minority and Women's Business-Equal Employment

APPENDIX B: The NYS CWSRF Smart Growth Assessment form

New York State Environmental Facilities Corpc
625 Broadway Albany, New York 12207-29
(518) 402-6924 Fax (518) 402-7456

Smart Growth Assessment
New York State Clean Water State Revolving Fund (CWSRF)

This form should be completed by the applicant's project engineer or other design professional. [7] Please refer to EFC's "Smart Growth Guidance." [8]

CWSRF Applicant:		CWSRF Project #:	

Is project construction complete?
Yes ☐ No ☐

Project Description:	

Project Summary: Please provide a short project summary of the project in plain language including the location of the area the project serves.

SECTION 1 - SCREENING QUESTIONS

1. Prior Approvals
   a. Has the project been previously approved for CWSRF financing?
      Yes ☐ No ☐
      If so, what was the CWSRF project number(s) for the prior approval(s)?

[7] If project construction is complete and the project was not previously financed through the CWSRF, an authorized municipal representative may complete and sign this assessment.

[8] Available at http://www.efc.ny.gov/Default.aspx?TabID=76&fid=436

b. If so, is the scope of the project substantially the same as that which was approved?
Yes ☐ No ☐

If the project was previously approved by EFC's Board and the scope of the project has not materially changed, the project is not subject to smart growth review. Skip to signature block.

2. New or Expanded Infrastructure
   a. Does the project add a new wastewater collection or treatment system? (Note: New infrastructure project adds wastewater collection or treatment where none existed previously.)
   Yes ☐ No ☐
   b. Will the project result in an increase of the State Pollution Discharge Elimination System (SPDES) permitted flow capacity for an existing treatment system? (Note: An expanded infrastructure project results in an increase of the SPDES permitted flow capacity for the treatment system.)
   Yes ☐ No ☐

If the answer is "No" to both "a" and "b," the project is not subject to further smart growth review. Skip to signature block.

3. Court or Administrative Consent Orders
   a. Is the project expressly required by a court or administrative consent order?
   Yes ☐ No ☐
   b. Have you previously submitted the order to NYS EFC?
   Yes ☐ No ☐ If not, please attach the order to this submittal.

SECTION 2 – ADDITIONAL INFORMATION NEEDED FOR RELEVANT SMART GROWTH CRITERIA FOR CWSRF PROJECTS

EFC has determined that the following smart growth criteria are relevant for CWSRF projects and that projects must meet each of these criteria to the extent practicable:

1. Uses or Improves Existing Infrastructure.
   a. Does the project use or improve existing infrastructure? Please indicate and describe below.
   Yes ☐ No ☐

2. Serves a Municipal Center. Projects must serve an area in either a, b or c to the extent practicable.
   a. Does the project serve an area **limited** to one or more of the following municipal centers? Please select and describe all that apply:
      i) A City or Incorporated Village.
      Yes ☐ No ☐
      ii) A central business district.
      Yes ☐ No ☐
      iii) A main street.
      Yes ☐ No ☐
      iv) A downtown area.
      Yes ☐ No ☐
      v) A Brownfield Opportunity Area. For more information, go to http://www.dos.ny.gov and search for "brownfield".
      Yes ☐ No ☐

vi) A downtown area of a Local Waterfront Revitalization Program Area. For more information, go to http://www.dos.ny.gov and search for "waterfront revitalization".
Yes ☐ No ☐

vii) An area of transit-oriented development.
Yes ☐ No ☐

viii) An Environmental Justice Area. See http://www.dec.ny.gov/public/899.html for more information.
Yes ☐ No ☐

ix) A Hardship/Poverty Area. Note: Projects that primarily serve census tracts and block numbering areas with a poverty rate of at least twenty percent according to the 2000 Census.
Yes ☐ No ☐

b. If the project serves an area located outside of a municipal center, does it serve an area located adjacent to a municipal center which has clearly defined borders, designated for concentrated development in a municipal or regional comprehensive plan and exhibit strong land use, transportation, infrastructure and economic connections to an existing municipal center? If yes, please describe and reference applicable plans.
Yes ☐ No ☐

c. If the project is not located in a municipal center as defined above, is the area designated by a comprehensive plan and identified in zoning ordinance as a future municipal center? If yes, please describe and reference applicable plans.
Yes ☐ No ☐

3. Community- Based Planning
a. Provide a description of the plan to solicit community input regarding the project.

b. Does the project affect an Environmental Justice Area? See http://www.dec.ny.gov/public/899.html for more information.
Yes ☐ No ☐

If yes, how does the applicant propose to engage the community in planning for the project?

4. Sustainable Development.
a. Were green infrastructure techniques considered in the project design? (Note: Green infrastructure includes green wet weather practices which mimic natural hydrology and use, infiltrate, evaporate or evapotranspire rain near or where it falls. These practices include permeable pavement; bioretention/ bioinfiltration systems including rain gardens; green roofs and walls; stormwater street trees/urban forestry; riparian buffers, floodplains and/or wetlands; stream daylighting; downspout disconnection and rainwater harvesting and reuse.
Yes ☐ No ☐
b. Were green infrastructure techniques adopted where appropriate? Please provide a description of measures that

were adopted and references to supporting material (for example, page 6 of "title of report") or explain why these measures were not adopted.

Yes ☐ No ☐

c. Were decentralized infrastructure techniques considered in the project design?
Yes ☐ No ☐

d. Were decentralized infrastructure techniques adopted where appropriate? Please provide a description of measures that were adopted and references to supporting material (for example, page 6 of "title of report") or explain why these measures were not adopted.
Yes ☐ No ☐

e. Were energy efficiency measures considered in the project design?
Yes ☐ No ☐

f. Were energy efficiency measures adopted where appropriate? Please provide a description of measures that were adopted and references to supporting material (for example, page 6 of "title of report") or explain why these measures were not adopted.
Yes ☐ No ☐

SECTION 3 – ADDITIONAL INFORMATION

1. Does the project include measures that exceed required natural resource protection? Please explain below.
Yes ☐ No ☐

2. Does the project support smart growth planning and design principles? Please explain below.
Yes ☐ No ☐

3. Other State Infrastructure Agencies must also complete a smart growth review prior to approving a project. Please check all agencies from which the applicant is seeking support and/or funding and the type of support or funding, as applicable.

☐ The Department of Environmental Conservation

☐ The Department of Transportation

☐ The Department of Education

☐ The Department of Health

☐ The Department of State

☐ The New York State Housing Finance Agency

☐ The Housing Trust Fund Corporation

☐ The Dormitory Authority

☐ The Thruway Authority

☐ The Port Authority of New York and New Jersey

☐ The Empire State Development Corporation

☐ The Urban Development Corporation

☐ All other New York State Authorities

By entering your name in the box below, you agree that you are authorized to act on behalf of the applicant and that the information contained in this Smart Growth Assessment is true, correct and complete to the best of your knowledge and belief.

(Signature of Project Engineer or Design Professional or Authorized Municipal Representative if construction is complete prior to CWSRF Application)

(Date)

(Name and Title)

( ) -

(Phone Number)

(Applicant)