SANTA MARIA INTEGRATED PLAN
WHITE PAPER

The Legal and Factual Support for an Integrated Approach to Achieving Water Quality Requirements

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I. Introduction and Summary of the Integrated Planning Proposal

The City of Santa Maria (“City” or “Santa Maria”) is confronted with a variety of water quality challenges. The City desires to work with the Central Coast Regional Water Quality Control Board (“Regional Board”) to develop an integrated plan to address these water quality challenges. The purpose of this white paper is to provide the legal and factual support for the City’s proposal and to generally explain how the City would like to address its water quality challenges in a comprehensive fashion.

Santa Maria faces both “on the ground” water quality challenges and regulatory challenges. The City’s water quality challenges include impaired water quality conditions in receiving waters resulting from urbanization, pollutant loading from agricultural and from other anthropogenic sources and pollutant loading from natural sources. These “on the ground” receiving water quality challenges are referred to in this white paper as “water quality conditions.”

Santa Maria’s water quality challenges also include implementing the many distinct and at times overlapping and inconsistent requirements imposed on the City by federal and state laws and regulatory actions. These regulatory requirements include National Pollutant Discharge Elimination System (“NPDES”) permits issued under the federal Clean Water Act (“CWA” or “Act”)¹ and Waste Discharge Requirements (“WDRs”) issued under California’s Porter-Cologne Water Quality Control Act (“Porter-Cologne”).² They also include total maximum daily loads (“TMDLs”), special post-construction requirements, ground water management obligations and Safe Drinking Water Act standards. These water quality regulatory requirements are referred to in this white paper as “water quality requirements.”

The City’s water quality conditions and the City’s water quality requirements are collectively referred to in this white paper as the City’s “water quality challenges.” Distinguishing between the water quality conditions (i.e., the “on the ground” impairments) and the water quality requirements (i.e., what the City is required to do to address the “on the ground” impairments) is important for the integrated planning concept discussed in this white paper. The integrated planning proposal is intended to provide the means by which the City will comply with its water quality requirements and thereby improve the water quality conditions.

Improving water quality conditions is a fundamental goal of the City. Through the municipal budgeting process, however, the City must balance implementation of this goal with its efforts to achieve other equally important municipal goals such as public safety (police and emergency services), public facilities (roads, bridges, libraries) and other community services (parks and community programs). In addition, the City must address its water quality challenges within its limited legal authority to control the root causes of many of the water quality

¹ 33 U.S.C. § 1251 et seq.
² Water Code § 13000 et seq.
conditions. For these reasons, the City has always stressed and attempted to implement the most cost-effective and streamlined process for meeting its water quality challenges.

To help focus the City’s efforts and prioritize its limited resources to address its water quality challenges, the City proposes to work with the Regional Board and stakeholders to develop an integrated, watershed-based plan (the “Integrated Plan”) to meet its water quality requirements and thereby improve water quality conditions. The Integrated Plan would consolidate in one place the City’s water quality requirements and outline the specific and measurable steps the City will take to achieve compliance with those requirements. Once approved by the Regional Board, implementation of the Integrated Plan and the achievement of the specific and measurable steps would allow the City to maintain compliance with its water quality requirements and to more effectively improve water quality conditions. The Integrated Plan would be based on both existing and new technical analysis, include an integrated monitoring plan, and would provide for regular assessment and adaptation to allow the Plan to evolve and be refined over time. The Plan would be developed through a public process and would be subject to Regional Board approval. The Plan would be implemented through the various regulatory permits issued to the City by the Regional Water Board and the State Water Resources Control Board (“State Board”).

This white paper provides the legal and factual support for moving forward with the development, approval and implementation of an Integrated Plan for the City. The white paper first assesses the existing federal and state legal support for an integrated, watershed-based approach to meeting water quality requirements. The white paper next outlines the key components that would be included in the City’s Integrated Plan. Finally, the white paper outlines a proposed process and timeline for the development, approval and implementation of the Integrated Plan.

II. Legal Support for the Integrated Planning Approach

The integrated planning approach finds both general and specific legal support in federal and state law and regulation. This section of the white paper will first discuss the specific federal regulatory support for this approach, and then the general support for the integrated planning approach found in the CWA. This section will then discuss the general and specific state law support for this approach as well as some examples of the use of this type of an approach in California.

A. The Clean Water Act

The CWA is a comprehensive water quality statute designed “to restore and maintain the chemical, physical and biological integrity of the Nation’s waters.” The Clean Water Act vests the Environmental Protection Agency (“EPA”) and states with “broad authority to develop long-

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3 A good example of this dilemma is water quality conditions resulting from the legal use of pesticides. Pesticides and their use are exclusively regulated by federal and state law, but the City is held accountable for pesticide pollution.

range, areawide programs to alleviate and eliminate existing pollution.”

Addressing existing water quality conditions through a holistic, watershed approach has “ample support in the CWA, its legislative history, and Supreme Court precedent.”

The CWA provides ample room for the development of an integrated planning approach to achieving the Act’s requirements. As one court recently phrased it, “[a]lthough nothing in the CWA specifically authorizes EPA to take this holistic, or watershed approach, it is equally true that nothing in the CWA prohibits such an approach.” Because the Act itself does not expressly address integrated planning, this white paper first addresses EPA’s regulatory support for the approach through its “gap filling” authority, and then looks at the authorities and constraints in the Act regarding that approach.

1. EPA Support for the Integrated Planning Approach

EPA has for many years been promoting a holistic, integrated and watershed-based approach to achieving improvements in water quality conditions and compliance with water quality requirements. In 2003, EPA issued a Watershed-Based NPDES Permitting Policy Statement. Among other things, this document listed a variety of benefits of an integrated, watershed approach, including: more environmentally effective results; greater ability to measure the effectiveness of targeted actions on improvements in water quality; greater opportunities for trading and other market-based approaches; reduced costs; more effective implementation of TMDLs; and potential integration with other programs such as the Safe Drinking Water Act. EPA followed up the Watershed-Based NPDES Policy Statement in 2003 and 2007 respectively with two guidance documents on the watershed approach.

In 2011, EPA issued a memorandum entitled “Achieving Water Quality Through Integrated Municipal Stormwater and Wastewater Plans.” The 2011 memorandum continued and expanded EPA’s focus on holistic, integrated water quality approaches, with an emphasis on providing municipal dischargers with flexibility to prioritize their CWA obligations. The 2011 memorandum acknowledges that regulators “must be mindful that many of our state and local government partners find themselves facing difficult financial conditions.” It further acknowledges that regulators “sometimes assess and implement the best alternative to solve one problem at a time without full consideration of all CWA obligations.” (Emphasis added.)

The memorandum encourages EPA regions to work with states to allow for comprehensive and integrated planning that would “put municipalities on a critical path to

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7 Id.
8 January 7, 2003 memorandum from G. Tracy Mehan, III, Assistant Administrator, to Water Division Directors Regions I-X.
10 October 27, 2011 memorandum from Nancy Stoner, Acting Assistant Administrator, Office of Water, and Cynthia Giles, Assistant Administrator, Office of Enforcement and Compliance Assurance, to EPA Regional Administrations.
achieving the water quality objectives of the CWA by identifying efficiencies in implementing sometimes overlapping and competing requirements that arise from separate waste- and storm-water programs, including how best to make capital investments and meet operation and maintenance requirements.” According to EPA, the “CWA and its implementing regulations, policy and guidance provide [EPA] with the necessary flexibility to work with communities to utilize comprehensive integrated planning to prioritize its waste- and storm-water investments.”

EPA followed up its 2011 integrated planning memorandum in May of 2012 with the “Integrated Municipal Stormwater and Wastewater Planning Approach Framework” (“Framework”). The Framework identifies the operating principals and essential elements of an integrated plan. The Framework establishes overarching principles, including, as relevant here: (1) maintaining existing regulatory standards that protect public health and water quality; (2) allowing municipalities to balance CWA requirements in a manner that addresses the most pressing public health and environmental protection issues first; and (3) embracing innovative technologies, including green infrastructure.

As EPA acknowledges, an “integrated program should be tailored to the size and complexity of the wastewater and stormwater infrastructure addressed in the plan.” Although details of each plan will vary, the Framework identifies the following six elements that should be addressed in most plans:

- Element 1: A description of the water quality, human health and regulatory issues to be addressed in the plan.
- Element 2: A description of existing wastewater and stormwater systems under consideration and summary information describing the systems’ current performance.
- Element 3: A process which opens and maintains channels of communication with relevant community stakeholders in order to give full consideration of views of others in the planning process and during implementation of the plan.
- Element 4: A process for identifying, evaluating, and selecting alternatives and proposing implementation schedules.
- Element 5: A process for evaluating performance of projects identified in a plan, which may include evaluation of monitoring data, information developed by pilot studies and other studies and other relevant information.
- Element 6: A process for identifying, evaluating and selecting proposed new projects or modifications to ongoing or planned projects and implementation schedules based on changing circumstances.

The Framework also addresses how integrated plans might be implemented. According to the Framework, all or part of an integrated plan can be incorporated into an NPDES permit as

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11 A copy of the Framework is included as attachment “A” to this white paper.
appropriate. In addition, all or part of an integrated plan may be incorporated into the remedy of a federal or state enforcement action.

Since issuing the Framework in May of 2012, EPA has actively promoted the integrated planning approach. EPA has held a number of listening sessions on the topic and, through Deborah Nagle (Director, Water Permits Division) and Mark Pollins (Director, Water Enforcement Division), has presented on the topic to a wide variety of industry groups. EPA also issued a “Frequently Asked Questions” document and has highlighted examples of initial integrated planning efforts.12

As illustrated above, there is strong support from EPA for the integrated planning approach. Although EPA has made it clear that integrated planning must occur within the opportunities and constraints of the Act, EPA has also made it clear that it believes the CWA, its implementing regulations, its policy and EPA guidance provide the necessary flexibilities to pursue an integrated planning approach. These opportunities and constraints of the Act are discussed below.

2. **Opportunities and Constraints of the CWA**

Because the Act does not expressly address integrated planning, legal support for the approach is found in the broad language of the Act, coupled with EPA’s regulatory support for the approach under its legal authority to implement the Act.14 As discussed below, several provisions of the Act provide such legal support. While the Act does include some potential constraints to the approach that are also discussed below, these constraints are not barriers to implementing the Plan as proposed by the City.

Several provisions of the Act provide EPA with broad legal authority sufficient to support the integrated planning approach. Most notably from a storm water perspective is Section 402(p)(3)(B) of the Act related to municipal stormwater permits.15 Among other things, Section 402(p)(3)(B)(i) allows MS4 permits to be issued on a system-or-jurisdiction-wide basis. This language appears to support a broader, more comprehensive approach to regulating storm water. More importantly, Section 402(p)(3)(B)(iii) creates a unique “maximum extent practicable” standard for storm water permits that is different than other NPDES permit standards. Under this approach, MS4 permits do not need to include water quality-based effluent limitations that mandate strict compliance with water quality standards.16 Inherent in the MEP standard is thus greater flexibility to address storm water through unique and innovative approaches, which certainly could include an integrated planning approach.

The integrated planning approach also finds support in the Act’s provisions regarding TMDLs, the continuing planning process and non-point source regulation. In accordance with

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12 A copy of EPA’s FAQ is included as attachment “B” to this white paper.
13 EPA points to examples that promote green infrastructure from the Milwaukee Metro Sewerage District, the City of Cleveland, the City of Kansas City, the City of St. Louis, Cincinnati/Hamilton County, City of Louisville and City of Chattanooga. Other current examples include the City of Seattle and Washington, D.C.
14 33 U.S.C. §§ 1251(c) and 1252(a); Chevron, USA Inc. v. Natural Res. Def. Council (1984) 467 U.S. 837, 842.
16 Defenders of Wildlife v. Browner (9th Cir. 1999) 191 F.3d 1159.
Section 303 of the Act, states develop TMDLs and a process to implement TMDLs and thereby achieve water quality standards. In preparing plans to implement TMDLs and achieve water quality standards, the states have a great deal of flexibility. Using an integrated approach to help achieve water quality standards falls well within this flexibility. In addition, under Section 319 of the Act, states have authority over non-point source regulation. The broad authority of the states over non-point source regulation supports an integrated planning approach, which must consider all sources of water quality problems.

Another provision of the Act that supports the integrated planning approach proposed by the City is Section 402(k). Section 402(k) provides that “compliance with a permit issued pursuant to this section shall be deemed compliance, for purposes of sections 1319 and 1365 of this title, with sections 1311, 1312, 1316, 1317 and 1343 of this title, except any standard imposed under section 1317 of this title for a toxic pollutant injuries to human health.” To the extent an integrated plan is incorporated into a permit, Section 402(k) provides that compliance with the plan would be compliance with the provisions of the Act. Once incorporated into the permit, the plan and its required measures could be the vehicle by which the City achieves compliance with the Act and by which the Regional Board and the public hold the City accountable for such compliance.

The permit reopener process of the Act and its implementing regulations further supports the integrated planning process, which may facilitate the types of adaptive management approaches contemplated in the Plan. In accordance with 40 CFR section 122.62(a), specific conditions of an NPDES permits may be reopened and modified for a variety of reasons. This reopener process may accommodate the adaptive management approach inherent in the integrated planning approach.

Under certain circumstances, the Act may pose some constraints on the integrated planning process. For example, to the extent an integrated plan addresses certain water quality-based effluent limitations that have been or are to be implemented through an NPDES permit, the provisions of the Act and the implementing regulations addressing compliance schedules may come into play. Compliance schedules specify a schedule leading to compliance with the CWA and its implementing regulations. Compliance schedules shall require compliance as soon as possible, but not later than the applicable statutory deadline under the CWA. Under the CWA, a permit may contain a compliance schedule for water quality based effluent limitations based on post July 1, 1977 state water quality standards, provided the schedule achieves compliance “as soon as possible” and the state has clearly indicated in its water quality standards or implementing regulations that it intends to allow such schedules. If compliance will take more than one year, the permit must include interim requirements and dates for their achievement. If compliance will exceed the 5 year term of the permit, the permit must include final effluent limitations.

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17 33 U.S.C. § 1313(a)-(e).
20 40 CFR § 122.47(a). See also, Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits, State Water Resources Control Board Resolution No. 2008-0025.
21 In the Matter of Star-Kist Caribe, Inc. (1990) 3 E.A.D 171, 177.
Because the bulk of the City’s proposed Plan will focus on how to best implement its storm water requirements, compliance schedules should not be a major impediment to the Plan. As noted above, the provisions of Section 402(p)(3)(B) do not require strict compliance with water quality standards in an MS4 Permit. Therefore, there is much greater flexibility regarding how and when water quality standards are to be achieved through an MS4 permit. This is particularly true with regard to implementation of TMDLs, which typically establish a long period of time in which ultimate compliance is to be achieved. Since strict water quality based effluent limitations are not required, and since TMDLs often establish a long compliance period, the regulatory requirements for compliance schedules should not preclude the integrated approach proposed by the City.

The Act and its implementing regulations also include certain anti-backsliding and anti-degradation provisions that would need to be addressed as part of the Regional Board’s approval of the Plan. In accordance with Section 402(o) of the Act, for specific effluent limitations established on the basis of specific sections of the Act, a permit may not be renewed or reissued that contains effluent limitations which are less stringent than the comparable effluent limitations in the previous permit. Similar provisions are found in 40 CFR section 122.44(l).

In addition, the implementing regulations of the Act require compliance with certain anti-degradation requirements. Under the anti-degradation requirements, existing in-stream water uses and the level of water quality necessary to protect the existing uses must be maintained and protected. In addition, water quality that exceeds existing standards must be protected unless certain findings are made. Finally, certain high quality water must be protected and maintained.

The purpose of an integrated plan is to achieve better water quality outcomes than those achieved under the current approach. Therefore, an integrated plan will prevent backsliding or degradation of water quality. Moreover, because the bulk of the City’s proposed Plan relates to its storm water requirements, the anti-backsliding provisions should not be an impediment. The City’s MS4 permit does not currently include numeric effluent limitations to which the anti-backsliding provisions might apply.

In summary, the Act contains broad legal authority that, coupled with EPA’s regulatory support for the integrated planning approach, provides firm federal legal support for the integrated planning concept. Because the integrated planning approach adopted by EPA must remain within existing CWA requirements, the constraints of the Act must be considered in the development, approval and implementation of the Plan. However, as proposed by the City, the constraints of the Act should not be impediments to approval and implementation of the Plan.

**B. Porter-Cologne**

Porter-Cologne provides both general and specific legal support for the integrated planning approach proposed by the City. In addition, the type of approach contemplated by the City is already in use, at least in part, by the Regional Board and other Regional Boards with

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regard to certain water quality requirements. This portion of the white paper first discusses the general and specific legal support for the integrated planning approach found in Porter-Cologne. It then provides some examples of how the Regional Board and other Regional Boards have in certain cases already pursued, at least in part, the type of holistic, watershed approach proposed by the City. The City’s approach would build on and expand from these existing examples.

1. General and Specific Porter-Cologne Authority for Integrated Planning

California’s Porter-Cologne Water Quality Control Act is a comprehensive water quality law that preceded the CWA. The purpose of Porter-Cologne is to “attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.”\(^{24}\) This purpose of Porter-Cologne is to be implemented by the State and Regional Water Boards through a unified and effective water quality control program.\(^{25}\)

Regional Boards have broad authority under Porter-Cologne to develop water quality control plans and to implement those plans through, among other actions, the issuance of waste discharge requirements (“WDRs”).\(^{26}\) The Regional Boards may prescribe requirements as to the discharge of waste into the waters of the State.\(^{27}\) Such requirements can address the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. Such requirements must implement the Regional Board’s water quality control plan. Under these and related provisions of Porter-Cologne, the Regional Board has broad authority to pursue the integrated planning approach proposed by the City.

In addition to the broad authority of Porter-Cologne, there are specific provisions in Porter-Cologne that support the use of a watershed-based approach to water quality improvements. For example, in 2009, the State adopted the Stormwater Resource Planning Act.\(^{28}\) This law authorizes cities, counties and special districts to develop stormwater resource plans.\(^{29}\) Such plans shall: (1) be developed on a watershed basis; (2) provide for multiple benefit project design to maximize water supply, water quality, and environmental and other community benefits; (3) provide for community participation in plan development and implementation; (4) be consistent with, and assist in, compliance with TMDL implementation plans and applicable NPDES permits; (5) be consistent with all applicable waste discharge permits; and (6) be consistent with any applicable integrated regional water management plan.\(^{30}\)

In addition, the State has also adopted the California Watershed Improvement Act of 2009.\(^{31}\) Under this law, a city that is a permittee or a copermitee under an NPDES permit for municipal separate storm sewer systems may develop, either individually or jointly, a watershed improvement plan that addresses major sources of pollutants in receiving water, stormwater,

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\(^{24}\) Water Code § 13000.
\(^{25}\) Water Code § 13001.
\(^{26}\) Water Code §§ 13240, 13260 and 13263.
\(^{27}\) Water Code § 13263.
\(^{28}\) Water Code § 10560.
\(^{29}\) Water Code § 10562(a).
\(^{30}\) Water Code § 10562(b).
\(^{31}\) Water Code §16100 et seq.
urban runoff, or other surface runoff pollution within the watershed or subwatershed to which the plan applies. The purpose of such plans is to implement existing and future water quality requirements and regulations by, among other things, where appropriate, identifying opportunities for stormwater detention, infiltration, use of natural treatment systems, water recycling, reuse, and supply augmentation. The plan should provide programs and measures designed to promote, maintain, or achieve compliance with water quality laws and regulations, including water quality standards and other requirements of stateside plans, regional water quality control plans, total maximum daily loads, and NPDES permits.

Water Code section 16100(c) provides that a city “shall notify the appropriate regional board of its intention to develop a watershed improvement plan” and gives regional boards the discretion to “participate in the preparation of the plan.” Water Code section 16101(d) outlines the following required elements of a watershed improvement plan:

- **Description of the Watershed:** The plan should describe the watershed or subwatershed improvement plan area, the rivers, streams, or manmade drainage channels within the plan area, the agencies with regulatory jurisdiction over matters to be addressed in the plan, the relevant receiving waters within or downstream from the plan area, and the county, city, special district, or combination thereof, participating in the plan.

- **Description of Facilities and Actions:** The plan should describe the proposed facilities and actions that will improve the protection and enhancement of water quality and the designated beneficial uses of waters of the state, consistent with water quality laws and regulations.

- **Implementation Plan:** The plan should make recommendations for appropriate action by any entity, public or private, to facilitate achievement of, or consistency with, water quality objectives, standards, total maximum daily loads, or other water quality laws, regulations, standards, or requirements, a time schedule for the actions to be taken, and a description of appropriate measurement and monitoring to be undertaken to determine improvement in water quality.

- **Financial Plan:** The plan should include a coordinated economic analysis and financing plan that identifies the costs, effectiveness, and benefits of water quality improvements specified in the watershed improvement plan, and, where feasible, incorporates user-based and cost recovery approaches to financing, which place the cost of managing and treating surface runoff pollution on the generators of the pollutants.

- **Regional Systems:** The plan should, to the extent practicable, include a description of regional best management practices, watershed-based natural treatment systems, low-flow diversion systems, stormwater capture, urban runoff capture, other measures constituting structural treatment best management practices, pollution prevention measures, low-impact development strategies, and

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32 Water Code § 16101(a).
site design, source control, and treatment control best management practices to promote improved water quality.

- Implementing Entity: The plan should describe the proposed structure, operations, powers, and duties of the implementing entity for the watershed improvement plan.

Once prepared, a regional board may review and approve a watershed improvement plan.\textsuperscript{33} A board’s review and approval includes all required aspects of the plan, other than the financial plan. In accordance with Water Code section 16102(d), a regional board can use the watershed improvement plan as a vehicle to measure compliance with its plans or programs.

Porter-Cologne thus provides both general and specific support for the type of integrated planning approach proposed by the City. To further demonstrate that such an approach is consistent with state law, the next section of the white paper provides examples of how other Regional Boards and this Regional Board have used this general approach, at least in part, on other occasions.

2. California Examples of the Integrated, Watershed Approach

Several Regional Boards in California have started to use aspects of an integrated, watershed approach to help address water quality challenges. A few examples of this approach are briefly discussed below.

a. Los Angeles MS4 Permit

In November of 2012, the Los Angeles Regional Water Quality Control Board (“LA Board”) adopted a new municipal storm water permit (“LA Permit”) for Los Angeles County.\textsuperscript{34} A crucial new component of the LA Permit is an optional watershed management program.\textsuperscript{35} Under this approach, jurisdictions may, individually or collectively, elect to develop watershed management programs or enhanced watershed management programs that meet the requirements of the LA Permit. These watershed programs become the core of an integrated approach that replaces the minimum requirements of the LA Permit.

The watershed management approach allows permittees to develop flexible, customized strategies to address the highest watershed priorities in an integrated fashion. As explained in the Fact Sheet for the LA Permit, “the watershed requirements serve as the mechanism for this program integration.” This integration inherently provides “flexibility to the Permittees in implementing their programs.”\textsuperscript{36} Such an integrated approach was believed by the LA Board to be the best way to achieve better water quality outcomes.

The watershed management programs in the LA Permit must be developed through a public process over a fixed time frame and must be approved by the LA Board. The watershed

\textsuperscript{33} Water Code § 16102(a).
\textsuperscript{34} Order No. R4-2012-0175.
\textsuperscript{35} See LA Permit, Section VI.C.
\textsuperscript{36} See LA Permit Fact Sheet, pp. F-38 to F-47.
management programs or enhanced watershed programs also provide a mechanism through which the permittee may comply with some or all of their water quality requirements, depending on the type of plan developed and the type of water quality requirement involved. As explained in the Fact Sheet, these compliance mechanisms “provide an incentive and robust framework for Permittees to craft comprehensive pathways to achieve compliance with receiving water limitations—both those addressed by the TMDLs and those not addressed by TMDLs.” 37

It should be noted that the LA Permit is currently subject to a number of petitions pending with the State Board.38 The State Board has requested and received written comments on the watershed management program approach in the LA Permit and has held a workshop on how the LA Board’s approach relates to the State’s approach to compliance with receiving water limitations language in MS4 permits. It is anticipated that the State Board will use the LA Permit to develop a policy on watershed management programs and permit compliance. If upheld by the State Board, the LA Permit’s approach would provide further legal support for the type of integrated approach proposed by the City.

b. **San Diego Regional MS4 Permit**

In May of 2013, the San Diego Regional Board adopted a new municipal storm water permit (“San Diego Regional Permit”) for the San Diego Region.39 The San Diego Regional Permit includes a mandatory water quality improvement plan component.40 The purpose of these water quality improvement plans are to “guide the Copermittees’ jurisdictional runoff management programs towards achieving the outcome of improved water quality in MS4 discharges and receiving waters.” The San Diego Regional Permit requires that a total of ten water quality improvement plans be jointly developed by the Copermittees located within the ten watershed management areas designed by the San Diego Board. Each plan must meet several elements set forth in the San Diego Regional Permit.

While moving toward a watershed-based approach, the San Diego Regional Permit does not allow for a fully integrated approach such as the one proposed by the City. First, the water quality improvement plans are not linked to compliance with permit requirements, including with receiving water limitations. They therefore do not provide the same type of “incentive and robust framework” that is provided in the LA Permit. Second, the water quality improvement plans are very “top-down” rather than flexible documents to be developed by the Copermittees. Third, the plans are mandatory and therefore do not have the full “buy-in” from the Copermittees that a voluntary approach such as the one taken in the LA Permit provides.

The San Diego Regional Permit is also the subject of a variety of petitions currently pending before the State Board.41 It is anticipated that the resolution of the petitions on the LA Permit will likely affect the petitions on the San Diego Regional Permit.

37 LA Permit Fact Sheet, p. F-38.
38 SWRCB/OCC Files A-2236(a)-(kk).
40 See San Diego Regional Permit, Section II.B.
41 SWRCB/OCC Files A-2254(a) – (p).
c. **Santa Ana TMDL Implementation**

The Santa Ana Regional Board has implemented a form of an integrated approach with several of its TMDLs and through the manner in which it has incorporated those TMDLs into MS4 permits. For example, with the Middle Santa Ana River Bacteria TMDL, the Regional Board allowed the dischargers to develop a comprehensive bacteria reduction plan (“CBRP”) to meet the WLAs in the TMDL through a BMP approach. These plans become the mechanism by which the dischargers comply with the WLAs and associated effluent limitations in their MS4 permits. This approach allows the dischargers to collaborate and be flexible about the bacteria challenges they faced, and also provides a compliance mechanism for the dischargers.

d. **Regional Board’s WAAP Approach**

The Regional Board, at least in part, has taken a similar approach in the Fecal Indicator Bacteria and the Nutrient TMDL for the Santa Maria River. These TMDLs allow municipal dischargers, including the City, to develop Wasteload Allocation Attainment Plans (“WAAPs”) to implement the TMDLs. At least in part, the WAAPs would form one of the bases by which the Regional Board could measure compliance with the TMDL. The Integrated Plan proposed by the City would expand on this approach and seek to broaden it out to all of the City’s water quality requirements.

### III. Santa Maria’s Water Quality Requirements and their Potential Integration

#### A. Santa Maria’s Water Management System and Water Quality Conditions

Santa Maria’s existing water management system and water quality conditions are well-documented in the City’s 2010 Storm Water Management Plan (“SWMP”) and in the 2010 “Santa Maria Valley Watershed Characterization for Hydromodification Management within the City of Santa Maria” prepared by Tetra Tech. These documents contain a detailed watershed characterization, discussion of both surface and groundwater impairments and explanation of the City’s existing water management system. Although they may need to be supplemented in certain areas, these documents would serve as the technical starting point for many important elements of the Integrated Plan.

This white paper will not duplicate the work already contained in the SWMP and the 2010 Watershed Characterization. However, to understand the City’s proposal, it is necessary to first understand several key components about the City’s watershed, its water management systems and its water quality conditions and sources of impairment.

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42 See Resolution R8-2005-0001 and Order Nos. R8-2010-33 and 36.
43 See Resolution Nos. R8-2012-0015 and 0016, noting that the “CBRP will serve as the final Water Quality Based Effluent Limitation for bacteria indicators during the dry season . . . .”
44 See, e.g., Resolution No. R3-2012-0002.
1. Key Watershed Characteristics

Several key watershed characteristics exist in the City which make an integrated planning approach a particularly viable method for the City to achieve its water quality requirements. These key watershed characteristics are briefly summarized below.

First, the City sits within the broad floodplain of the Santa Maria River, and contains no documented natural streams. Rather, over time, the Santa Maria River has been leved and a series of flood-control channels and basins have been constructed to protect the agricultural and urban communities from flooding and erosion. While many of these channels carry flow from irrigated fields, they are not natural surface waters but man-made channels. These channels are not “surface water bodies” as that term is used in the Water Quality Control Plan for the Central Coastal Basin. Properly addressing the physical characteristic of these channels and the dynamics of man-made conveyances, as opposed to natural, “surface water bodies” is one of the most pressing water quality challenges facing the City.

Second, the City is very flat and the soils within the City, in general, infiltrate well because many of the soils consist of riverbed sediments or sand dune sediments. This means that the City does not face a significant hydromodification management problem. It also means that storm water detention, natural treatment and groundwater recharge projects are viable options for the City. This aspect of the City’s watershed is thus a great opportunity that will play a vital role in the City’s Integrated Plan.

2. Key Elements of the City’s Water Management System

The two key watershed characteristics identified above have also influenced two key elements of the City’s water management system. These elements of the City’s system must properly be taken into account if the City is to achieve its water quality requirements.

First, as discussed above, a major part of the City’s storm water management system consists of man-made channels and ditches constructed to route runoff and control flooding. Three important channels, owned by the Santa Barbara Flood Control District, are the Blosser Channel, the Bradley Channel and the Main Street Canal. For the City to achieve its water quality requirements, it is important to treat these channels as man-made channels. Treating these channels for what they are, and not as natural surface water bodies, will allow the City to develop larger treatment projects that will provide greater overall benefit to the watershed.

Second, another major part of the City’s storm water management system consists of a series of large and small detention and retention facilities. Many of these facilities detain and infiltrate a large amount of storm water. Others retain storm water, infiltrate some of the water and slowly release the remaining water. This feature of the City’s system again creates a significant opportunity to develop larger-scale treatment and infiltration projects that will have multiple water quality and water supply benefits. By using the channels and the basins, the City could create a City-wide detention, retention and treatment system.

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45 See 2010 Watershed Characterization, pp. 29-30; SWMP, pp. 2-5 to 2-7.
46 See 2010 Watershed Characterization, pp. 34-35; SWMP, p. 2-6; See also, Draft City of Santa Maria Watershed Plan, pp. 5-6.
3. **Key Water Quality Conditions and Sources of Impairment**

Another key aspect of the City’s water quality challenges is that it does not control the source of many of its water quality impairments. While the City does contribute to the existing water quality conditions, and will continue to reduce its loading of pollutants to the system, the City’s contribution, even if completely eliminated, would not likely address most of the receiving water problems. This is because the City does not have the ability to directly stop loading of pollutants such as nutrients and pesticides that form the basis of many of the water quality conditions. However, if the City is provided flexibility through an integrated planning approach to address water quality problems holistically, the City may be able to allocate its resources in a way that will help address the water quality conditions regardless of their source. The Integrated Plan proposed by the City is intended to achieve this result.

With these key watershed characteristics in mind, the remaining portion of this section of the white paper will summarize the City’s water quality requirements and the next section will outline a general plan to integrate them.

B. **Santa Maria’s Water Quality Requirements**

1. **Phase II Permit**

   The City is enrolled as a permittee on the State Board’s 2013 Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (“Phase II Permit”), and was previously enrolled as a permittee on the State Board’s 2003 Phase II Permit. The Phase II Permit imposes a large number of water quality requirements on the City in the areas of program management, education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site storm water runoff control, pollution prevention/good housekeeping, post construction storm water management, monitoring, program effectiveness assessment, TMDL compliance and reporting.

   Under the 2003 Phase II Permit, the City developed and implemented a Storm Water Management Plan (“SWMP”) that described the steps the City would take to comply with the 2003 Phase II Permit. The City’s SWMP included a description of how it would implement the six minimum control measures required by the 2003 Phase II Permit. For each minimum control measure, the City established specific best management practices (“BMPs”) and measurable goals (“MGs”) for each of those BMPs. This approach was consistent with the 2003 Phase II Permit and the requirements established by the Regional Board for enrollment. However, this approach requires a great deal of staff time to track paperwork and generally resulted in a “bean counting” approach to meeting water quality requirements that was not always linked to actual improvements to water quality conditions.

   Under the 2013 Phase II Permit, the City has developed and is implementing a guidance document that satisfies the requirements of Section A.1.b.4 of the Phase II Permit. The City’s guidance document sets forth how the City will implement the requirements of the new Phase II Permit, including how the City will continue to implement those BMPs from the SWMP that are more protective of water quality than the requirements of the Phase II Permit. The guidance

47 Order No. 2013-0001-DWQ.
document is a more streamlined approach to outlining the City's Phase II Permit compliance efforts and allows the City to focus more directly on improvements to water quality conditions and less on staff-intensive “bean counting” exercises.

Regional Board staff has recently notified the City that staff desires to have the City continue to use the MG approach contained in the SWMP. Because the City believes that continuing the specific MG approach will divert staff time and resources away from actual improvements to water quality conditions, the City wishes to continue to use the more streamlined, guidance document approach contemplated in the Phase II Permit. However, in the Integrated Plan, the City could identify the BMPs it will implement under the Phase II Permit and the remaining, applicable MGs associated with those BMPs, so that the Regional Board and the public can understand and track the City's compliance with the Phase II Permit.

A few specific provisions of the Phase II Permit are important to the development, approval and implementation of the Integrated Plan. First, in Section G of the Phase II Permit, the Regional Board is delegated with authority to require modifications to storm water program components and to impose region-specific monitoring requirements. This delegated authority would allow the Regional Board to consider and approve the Integrated Plan as the City’s storm water program and region-specific monitoring approach consistent with the requirements of the Phase II Permit.

Second, in Section F.5.i of the Phase II Permit, the Regional Board is directed to review the TMDL-specific permit requirements contained in Attachment G and to propose to the State Board any appropriate revisions to Attachment G after consultation with the permittees and the State Board. Currently, Attachment G does not contain any TMDL-specific permit requirements for the City. Section F.5.i of the Phase II Permit could be used by the Regional Board to propose to the State Board that the City’s current and future compliance with adopted TMDLs be through the Integrated Plan. Under this approach, the components of the Integrated Plan that address the TMDLs applicable to the City would be incorporated into Attachment G and become the means by which the City complies with the TMDL’s waste load allocations.

It should also be noted that the City intends to continue to implement the core elements of its storm water program through the proposed Integrated Plan. Therefore, while the Integrated Plan would provide the City with greater flexibility to achieve its water quality requirements, the core program would continue in a measurable way.

2. Post-Construction Requirements.

The Regional Board has through Resolution No. R3-2013-0032 adopted specific post-construction stormwater management requirements for the Central Coast Region. In accordance with Resolution No. R3-2013-0032 and Section E.12.K of the Phase II Permit, the City must comply with these specific post-construction stormwater management requirements.

The Regional Board’s post-construction requirements categorize the Central Coast Region into 10 Watershed Management Zones and establish specific performance requirements for each zone. The City falls within Watershed Management Zones 1 and 4. For these zones, the post-construction requirements create site design, water quality treatment, runoff retention
and peak flow management requirements for regulated projects. With regard to water quality treatment, regulated projects meeting certain criteria for impervious surfaces would have to include water quality treatment for the 85th percentile storm. For runoff retention, regulated projects meeting threshold criteria for impervious surfaces would be required to retain the 95th percentile storm. For peak flow management, regulated projects would need to manage peak flows for the 2 through 10-year storm events.

The post-construction requirements include provisions that allow for alternative compliance with the water quality treatment, runoff retention and peak management performance requirements. Alternative compliance is achieved off-site through mechanisms such as developer fee-in-lieu arrangements and/or use of regional facilities. One method of alternative compliance is through the use of an approved Watershed or Regional Plan. An approved Watershed or Regional Plan may be used to justify alternative compliance for a regulated project’s numeric runoff retention and peak management performance requirements without a demonstration of infeasibility and the projects identified in the Plan may be used to meet water quality treatment performance requirements if on-site treatment is infeasible and an equivalency demonstration has been made. This alternative compliance option is consistent with Section E.12.L of the Phase II Permit, which allows a permittee to propose alternative post-construction measures in lieu of some of all of Section E.12 requirements for multiple benefit projects.

The City has developed a draft Watershed Plan as an alternative compliance mechanism for the post-construction requirements. The City’s Watershed Plan is consistent with and would be incorporated into the proposed Integrated Plan if the Watershed Plan is separately approved by the Regional Board. The City’s Watershed Plan could also be directly incorporated into the Integrated Plan and approved concurrently with the Plan.

3. TMDLs.

The City is or will soon be subject to four TMDLs that establish or will establish stringent water quality requirements that will shape the City’s water quality program for decades. These TMDLs are: (1) the TMDL for Fecal Indicator Bacteria in the Santa Maria River Watershed (“FIB TMDL”) adopted by the Regional Board through Resolution R3-2012-0002, which became effective on or about February 21, 2013; (2) the TMDL for Nitrogen Compounds and Orthophosphates in the Lower Santa Maria River Watershed (“Nutrient TMDL”) adopted by the Regional Board through Resolution R3-2013-0013, which is anticipated to become effective in 2014; (3) the TMDL for Toxicity and Pesticides in the Santa Maria Watershed (“Pesticide TMDL”) which is anticipated to be considered by the Regional Board in January of 2014 and which will likely become effective in late 2014; and the TMDL for Salts in the Santa Maria Watershed (“Salts TMDL”), which is currently in development by the Regional Board.

Each of these TMDLs requires or will require the City to develop and implement a Wasteload Allocation Attainment Program (“WAAP”). Because many of the efforts the City will undertake to address an individual TMDL will apply equally to the other TMDLs, the Integrated Plan could serve as one consolidated WAAP for the four TMDLs. The individual requirements of each of the TMDLs is discussed in more detail below.
a. **The FIB TMDL**

The FIB TMDL seeks to address FIB impairments in the Santa Maria River Watershed, including, as relevant here, in the Blosser Channel, Bradley Channel, Main Street Canal and the Santa Maria River. The FIB TMDL assigns three receiving water waste load allocations ("WLA") to the City—two for storm water discharges and one for the City’s sanitary sewer collection system. As to storm water, the FIB TMDL establishes a fecal coliform concentration-based WLA. Under this WLA, fecal coliform concentrations, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 mL, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 mL. The FIB TMDL also establishes a WLA for *E. coli*. Under this WLA, based on a statistically sufficient number of samples (generally not less than five samples equally spaced over a 30-day period), the geometric mean of *E. coli* densities shall not exceed 126 per 100 mL, and no sample shall exceed a one-sided confidence limit (C.L.) calculated using the following as guidance: lightly used for contact recreation (90% C.L.): 409 per 100 mL.

The FIB TMDL establishes a target date of 15 years (i.e., in or about February of 2028) for achievement of the WLAs for storm water. The FIB TMDL establishes base-line interim targets of 20% progress toward the WLA by the fifth year, 50% progress toward the WLA by the 10th year and 100% progress toward the WLA by the 15th year.

The City must develop and submit for approval a WAAP describing how the City will meet the WLAs. The WAAP must address: (1) development of an implementation and assessment strategy; source identification and prioritization; (3) BMP identification, prioritization, implementation schedule, analysis and effectiveness assessment; (4) monitoring and reporting program development and implementation; (5) coordination with stakeholders; and (6) other pertinent factors. The FIB TMDL provides that demonstration of compliance with the WLAs and interim targets may be demonstrated in a variety of ways, including through the implementation of BMPs capable of achieving interim targets and wasteload allocations in combination with water quality monitoring for a balanced approach to determining effectiveness.

In accordance with the FIB TMDL, the City is required to submit the WAAP by either February 5 or February 21, 2014, but Regional Board staff has directed the City to wait to submit the WAAP until after the FIB TMDL is incorporated as an enforceable requirement in the Phase II Permit.

In addition to the WLA for storm water discharges, the FIB TMDL assigns the City a WLA for discharges associated with the City’s wastewater collection system. In accordance with this WLA, no fecal coliform nor *E. coli* bacteria load originating from human sources of fecal material is allowed. In other words, the FIB TMDL assigns a WLA of zero for fecal coliform and *E. coli* from the wastewater collection system. The FIB TMDL states that the City will show compliance with this portion of the TMDL through complying with the existing statewide general waste discharge requirements for sewer collection systems.
b. **The Nutrient TMDL**

The Nutrient TMDL seeks to address nitrate, unionized ammonia and orthophosphate impairments in the Lower Santa Maria River Watershed, including, as relevant here, nitrate and unionized ammonia impairments in the Santa Maria River, Blosser Channel, Bradley Channel, Main Street Canal and North Main Street Channel. The Nutrient TMDL assigns two receiving water WLAs to the City. First, the Nutrient TMDL assigns the City a year-round, concentration-based limit for Nitrate as N of 10 mg/L. Second, the Nutrient TMDL assigns the City a year-round, concentration-based limit for unionized ammonia of .025 mg/L. The Nutrient TMDL provides that these WLAs shall be achieved by the City 12 years after the effective date of the TMDL (i.e., achievement by an estimated of in or about the fall of 2026).

The Nutrient TMDL, as adopted by the Regional Board, requires the City to develop and submit for approval a WAAP within one year of the effective date of the TMDL. The WAAP must address the same six items outlined above regarding the FIB TMDL. The FIB TMDL also provides that Regional Board staff may evaluate compliance with the WLAs using a variety of means specified in the TMDL, including nutrient concentration reductions at storm water outfalls, load reductions downstream of treatment systems or implementation and assessment of pollutant loading reduction projects that are capable of achieving the WLAs.

c. **The Pesticide TMDL**

The Pesticide TMDL seeks to address toxicity and pesticides in the Santa Maria Watershed. As relevant to the City, the Pesticide TMDL addresses pyrethroid and organochlorine (“OC”) related impairments in the Santa Maria River, the Blosser Channel, the Bradley Channel and the Main Street Canal. The Regional Board is scheduled to consider the Pesticide TMDL on or about January 30, 2014 and staff’s final documents for the Pesticide TMDL will be available on or about January 15, 2014.

Based on drafts of the Pesticide TMDL and conversations with Regional Board staff, the Pesticide TMDL will assign the City WLAs related to OC and toxicity. While the Pesticide TMDL will include numeric targets for pyrethroids, it is anticipated that the City will not receive a specific pyrethroid pesticide WLA. It is further anticipated that the target dates for TMDL compliance will be 15 years for toxicity and 30 years for OC.

As with the FIB TMDL and the Nutrient TMDL, the Pesticide TMDL will likely require the City to develop and submit for approval a WAAP addressing the six items discussed above regarding the FIB and Nutrient TMDLs. As with both the FIB and Nutrient TMDLs, it is anticipated that compliance may be demonstrated through a variety of means, including implementation and assessment of pollutant loading reduction projects capable of achieving interim and final waste load allocations identified in the TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness.

d. **The Salts TMDL**

The Salts TMDL will, when developed, likely seek to address chloride, sodium and boron impairments in the Santa Maria Watershed. At this time, the Regional Board staff has not issued any draft documents related to the Salts TMDL. However, in the Integrated Plan, it may be
possible to address Salts-related impairments in advance of the development and adoption of the Salts TMDL. In this way, it may be possible to forestall the need for the Salts TMDL.

4. POTW.

The City owns and operates a municipal wastewater collection, treatment, and disposal system located at 601 Black Road. The recently expanded system is designed to treat 13.5 MGD with wastewater treatment processes including headworks, grit removal, primary clarifiers, trickling filters, intermediate clarifier, secondary trickling filters, secondary clarifiers, gravity sludge thickeners, anaerobic digesters, and sludge drying beds. The treated wastewater is disposed of through the use of percolation ponds. There is no surface water discharge from the treatment facility to receiving waters, including the Santa Maria River, and storm water flows from the facility process area are directed to the head works and commingled with wastewater, thus preventing any discharge of storm water from the site.

The City holds a WDR from the Regional Board (Order No. R3-2010-0001) for the POTW and the discharges to the percolation ponds. The WDR contains effluent limitations for biochemical oxygen demand, total suspended solids, settleable solids, total dissolved solids, sodium, chloride and pH. The WDR also contains various receiving water limitations for groundwater. In addition, the WDR requires the City to maintain an ongoing salt/nutrient management program with the intent of reducing mass loading of salts and nutrients in treated effluent.

It is unclear at this time exactly how the Integrated Plan might address the City’s water quality requirements related to the POTW. During plan development, efficiencies associated with POTW operations and the City’s other water quality requirements may be identified. In particular, there may be ways to integrate obligations for salt and nutrient reductions at the POTW with broader salt and nutrient problems in the watershed. Consideration may also be given to the salt and nutrient trading programs. These details would need to be fully addressed in plan development.

5. Groundwater and Safe Drinking Water Act

The City owns and operates a water supply system that is subject to, among many other provisions, the requirements of the federal and state Safe Drinking Water Acts. Among other things, these federal and state laws impose specific requirements for maximum contaminant levels (“MCLs”) for a large number of contaminants.

The City’s water supply consists of imported water from the State Water Project and local groundwater. In 2012, approximately 86% of the City’s water came from the State Water Project, with the balance coming from local sources. Local groundwater is blended with imported water in order to meet federal and state MCLs.

There are no current water quality issues directly affecting the City’s water supply and the City does not anticipate any future water quality issues.

It is unclear at this time exactly how the Integrated Plan might address the City’s water quality requirements as they relate to its water supply system and the City’s use of groundwater. Some shallow groundwater in the Santa Maria Basin is contaminated with nitrates and the City is concerned about how the contamination may impact the City’s groundwater wells. Salts are also a concern. The City may be able to address some of these groundwater issues in an integrated fashion in the Plan.

6. **Other Water Quality Requirements**

The City must comply with other water quality requirements for some of its other municipal functions. These include meeting water quality requirements for the operation of the City’s landfill, complying with the State Construction Permit as applicable and complying with the requirements of Section 404 and 401 of the CWA, as applicable. The Integrated Plan could assess whether these requirements could also be included in the Plan.

C. **Integration of Santa Maria’s Water Quality Requirements**

In order to best and most efficiently implement the various water quality requirements discussed above, the City proposal to develop and implement an Integrated Plan to achieve its water quality requirements. As explained in Section IV of this white paper, the Integrated Plan would be developed through a public process and would be approved by the Regional Board. Once approved, the Integrated Plan would not only provide the City with a compliance mechanism for achieving its water quality requirements but would also provide the Regional Board and the public with a measureable way in which to hold the City accountable for meeting its water quality requirements.

An initial outline of the City’s proposed Integrated Plan is included as Attachment “C” to the white paper. To help the City integrate its City’s water quality requirements, the proposed Integrated Plan contains the following five major components: (1) the continuation of existing technology-based requirements; (2) the continuation and refinement of the City’s existing core storm water program; (3) the expansion and development of a City-wide detention, retention and treatment system through the use of existing and new water quality basins to achieve water quality-based requirements; (4) an integrated monitoring program; and (5) an adaptive management process. This section of the white papers discusses these five major components.

1. **Continuation of Existing Technology-Based Requirements**

The City is currently subject to certain existing technology-based water quality requirements, most notably for its operations at the POTW. These technology-based water quality requirements represent the treatment level that should be attainable through the implementation of existing treatment technology. The Integrated Plan would not seek to change the City’s existing technology-based requirements, and the City would continue to meet these requirements through the use of its currently employed systems.

2. **Continuation and Refinement of Core Storm Water Program**

As required by the 2003 Phase II Permit, the City developed and implemented a Storm Water Management Plan. The SWMP established a comprehensive storm water management
program for the City which has been actively implemented by the City since its enrollment under the Phase II Permit. In light of the 2013 adoption of a new Phase II Permit by the State Board, the City has developed a Santa Maria Storm Water Program Guidance Document and is actively implementing the program outlined in the guidance document.

Under the Integrated Plan, the City will continue to implement the core storm water program as outlined in the guidance document. The City will also work with the Regional Board to include certain agreed upon measurable goals for the various BMPs that are part of the City’s core storm water program. It is the City’s desire to move away from a “bean counting” approach to storm water management and toward a more results-driven approach. Therefore, the City does not wish to simply recreate its prior SWMP through the Integrated Plan. However, the City understands the value of having measurable and enforceable requirements, and is willing to work with the Regional Board to include measurable goals that support the results-driven approach. These measurable goals would be subject to refinement through the adaptive management process. Nevertheless, they would provide a means for the City, the Regional Board and the public to track the City’s implementation of its core storm water program.

3. Expansion and Development of a City-Wide Detention, Retention and Treatment System through Existing and New Water Quality Basins

The topography, soils and drainage characteristics in the City offer a significant opportunity to capture, infiltrate and treat a significant amount of storm water and other runoff through the use of water quality basins. Properly designed, maintained and operated, these basins provide for multiple benefits, including groundwater recharge, water quality treatment, hydromodification management and flood protection. The expansion and development of a City-wide basin system will be the key way in which the Integrated Plan proposes to achieve the City’s water quality-based water quality requirements. Through the use of such a basin system, the City believes that it will significantly improve the quality of the water discharged from the City to the Santa Maria River.

The City already has a network of approximately 65 publicly and privately-owned basins that not only provide flood control protection but also provide water quality benefits such as pollutant and sediment removal and peak flow attenuation. Some of these basins are detention basins which are intended to capture and hold runoff for a period before releasing it downstream at a controlled rate. Other basins are retention basins which are intended to hold water indefinitely and release water only through infiltration and evaporation/evapotranspiration.

Many of the basins within this existing network were requirements of new development. Generally, new development must construct detention basins with storage volumes of not less than 0.07 acre-feet per acre of residential development and not less than 0.10 acre-feet per acre of commercial or industrial development. The City requires that the 25-year 24-hour storm volume be stored and released at a rate not exceeding 0.07 cubic feet per second per developed acre. These requirements have generally resulted in reducing developed 25-year storm water discharges to a level of approximately a 2-year discharge under pre-development conditions.

Other basins within this network are major recharge basins owned and operated by the County of Santa Barbara or its Flood Control District. These major facilities include the Orcutt
Recharge Project which collects storm water flows from the City and the Orcutt community into several storm water recharge basins. The five basins within this project can hold approximately 422 acre-feet and can permanently store 85 acre-feet. In addition to the Orcutt Recharge Project, the Blosser Basin, the Bradley Basin, the Betteravia Basin and the Adams Basin can hold approximately 686 acre-feet of water and can permanently store 425 acre-feet.

In the Integrated Plan, the City would identify and implement projects to expand this existing system into a City-wide detention, retention and treatment system. Representative projects would include: (1) the Blosser Ditch Treatment Swale, which would divert water from the Blosser Ditch south of Canal Street and infiltrate it through an approximately 2,500 foot treatment swale; (2) the Bradley/Blosser/Main Treatment Basin, which would receive, detain and infiltrate flows from either Blosser Ditch, Bradley Channel or Main Street Ditch; and (3) the Bradley Channel Agricultural Tailwater Treatment Project, which create a wood-chip based denitrification system to treat water diverted from the Bradley Channel.

A key aspect of this City-wide water quality basin approach will be the recognition that the man-made channels that connect the City’s basin system are not natural surface waters. Because there are no apparent or documented natural streams in the City’s boundaries, the City’s water quality program should reflect the physical characteristics and dynamics of man-made, as opposed to natural, surface waters, and focus instead on achieving water quality standards at discharge points to the Santa Maria River. This approach would allow the City to tackle overall watershed problems reflected in the quality of water running through the existing channel system and achieve better water quality results at the point of discharge to the Santa Maria River.

4. Integrated Monitoring

The Integrated Plan would include an integrated monitoring program. The goal of the integrated monitoring program would be to implement monitoring that represents compliance with all of the City’s existing monitoring obligations in one consolidated program. Such an integrated monitoring program will more efficiently measure the overall success of the Integrated Plan and the overall health of the watershed.

5. Adaptive Management Process

Based on the integrated monitoring program, the Integrated Plan would include a public process through which the Integrated Plan can be adapted to reflect monitoring results and changing conditions. Major changes to the Integrated Plan that come out of the adaptive management process would also be subject to Regional Board approval.

IV. Timeline and Process for Plan Development and Approval

The City would like to develop and obtain approval of the Integrated Plan over the next 12 months. The City’s anticipated timeline for Plan development and approval is briefly described in this section of the white paper.

First, the City intends to present the white paper and Plan outline to the Regional Board in January of 2014. The City would anticipate working collaboratively with the Regional Board
to refine the Plan outline and obtain staff-level support for the Integrated Plan approach by on or before April 15, 2014. This process could include an informational item at the Board level to obtain direction and initial Board-level support for the concept.

Second, the City would retain the technical consultants necessary to develop the draft Integrated Plan. During the drafting process, the City would hold a series of stakeholder meetings to help inform the development of the draft Integrated Plan. The City’s goal would be to complete a draft of the full Integrated Plan by on or about October 15, 2014.

Third, the City would work with Regional Board staff to finalize the draft Integrated Plan for Regional Board approval by on or before December of 2014.

One additional aspect of the Integrated Plan development and implementation process should be noted. Because the Integrated Plan would attempt to break-through the “silos” approach to water quality regulation, the City would like to work with the Regional Board to fix one Regional Board staff contact for Plan development and implementation. Such a streamlined approach would facilitate knowledge of the Plan and result in more effective and efficient implementation.

V. Conclusion

Both EPA and the State have recognized that integrating water quality requirements offers the most efficient way to satisfying such requirements and thereby achieve improvements to water quality conditions. Through this white paper, the City has attempted to set forth the legal support for using such an integrated approach in Santa Maria. The City looks forward to working with the Regional Board to pursue this integrated approach and improve water quality conditions in the Santa Maria Valley.
ATTACHMENT A

INTEGRATED MUNICIPAL STORMWATER AND WASTEWATER PLANNING APPROACH FRAMEWORK
May, 2012
INTEGRATED MUNICIPAL STORMWATER AND WASTEWATER PLANNING APPROACH FRAMEWORK
May, 2012

The purpose of this framework is to provide further guidance for EPA, States and local governments in developing and implementing effective integrated plans under the Clean Water Act (CWA). The framework identifies the operating principles and essential elements of an integrated plan. The integrated planning approach is voluntary. The responsibility to develop an integrated plan rests with the municipality that chooses to pursue this approach. If a municipality decides to take advantage of this approach, the integrated plan that it develops can provide information to inform the permit and enforcement processes and can support the development of conditions and requirements in permits and enforcement orders. The integrated plan should identify the municipality’s relative priorities for projects and include a description of how the proposed priorities reflect the relative importance of adverse impacts on human health and water quality and the municipality’s financial capability. The integrated plan will be the starting point for development of appropriate implementation actions, which may include requirements and schedules in enforceable documents.

EPA will continue to provide opportunities for stakeholder input during the implementation of this framework. Outreach activities associated with this effort will include the development of case studies and best practices.

EPA recognizes that approved National Pollutant Discharge Elimination System (NPDES) States are partners in the implementation of the program and have the lead for the day-to-day activities in their States. Many States have existing water quality management planning processes, which may include those established under Section 208 and 303 of the CWA, that may help facilitate the development of an integrated plan and work in conjunction with the implementation of an integrated plan. Integrated plans should be consistent with, and designed to meet the objectives of, existing total maximum daily loads (TMDLs). EPA is committed to working closely with the States in the implementation of this framework. EPA Regions and Headquarters will work with States when appropriate to determine the proper response to an integrated plan.

I. Background

In recent years, EPA has begun to embrace integrated planning approaches to municipal wastewater and stormwater management. EPA further committed to work with States and communities to implement and utilize integrated planning approaches to municipal wastewater and stormwater management in its October 27, 2011 memorandum “Achieving Water Quality Through Municipal Stormwater and Wastewater Plans.”1 Integrated planning will assist municipalities on their critical paths to achieving the human health and water quality objectives of the CWA by identifying efficiencies in implementing requirements that arise from distinct wastewater and stormwater programs, including how best to make capital investments.

1 The October 27, 2011 memorandum is available at http://cfpub.epa.gov/npdes/integratedplans.cfm.
Integrated planning can also facilitate the use of sustainable and comprehensive solutions, including green infrastructure, that protect human health, improve water quality, manage stormwater as a resource, and support other economic benefits and quality of life attributes that enhance the vitality of communities. In February, 2012, EPA released “Planning for Sustainability: A Handbook for Water and Wastewater Utilities.” The Handbook describes a number of steps utilities can take to build sustainability considerations into their existing planning processes and make the best infrastructure choices that protect water quality and ensure the long-term sustainability of infrastructure assets. The elements of an integrated plan which are described below are complementary to the elements in the Sustainability Handbook.

The integrated planning approach does not remove obligations to comply with the CWA, nor does it lower existing regulatory or permitting standards, but rather recognizes the flexibilities in the CWA for the appropriate sequencing and scheduling of work.

II. Principles

Following are overarching principles that EPA will use in working with municipalities to implement an integrated approach to meet their wastewater and stormwater program obligations under the CWA. Also presented are guiding principles that EPA recommends municipalities use in the development of their integrated plans.

Overarching Principles

1. This effort will maintain existing regulatory standards that protect public health and water quality.

2. This effort will allow a municipality to balance CWA requirements in a manner that addresses the most pressing public health and environmental protection issues first.

3. The responsibility to develop an integrated plan rests with the municipality that chooses to pursue this approach. Where a municipality has developed an initial plan, EPA and/or the State will determine appropriate actions, which may include developing requirements and schedules in enforceable documents.

4. Innovative technologies, including green infrastructure, are important tools that can generate many benefits, and may be fundamental aspects of municipalities’ plans for integrated solutions.

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Principles to Guide the Development of an Integrated Plan

Integrated plans should:

1. Reflect State requirements and planning efforts and incorporate State input on priority setting and other key implementation issues.

2. Provide for meeting water quality standards and other CWA obligations by utilizing existing flexibilities in the CWA and its implementing regulations, policies and guidance.

3. Maximize the effectiveness of funds through analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality related challenges and non-compliance.

4. Evaluate and incorporate, where appropriate, effective sustainable technologies, approaches and practices, particularly including green infrastructure measures, in integrated plans where they provide more sustainable solutions for municipal wet weather control.

5. Evaluate and address community impacts and consider disproportionate burdens resulting from current approaches as well as proposed options.

6. Ensure that existing requirements to comply with technology-based and core requirements are not delayed.

7. Ensure that a financial strategy is in place, including appropriate fee structures.

8. Provide appropriate opportunity for meaningful stakeholder input throughout the development of the plan.

III. Elements of an Integrated Plan

Defining Scope

NPDES requirements for separate sanitary sewer systems, combined sewer systems, municipal separate storm sewer systems and at wastewater treatment plants may be included in an integrated plan. Each of the aforementioned systems may have different owners/operators responsible for the various sewer systems and treatment plants as well as different geographic service areas and different service populations. In addition, integrated plans may address source water protection efforts that protect surface water supplies, and/or nonpoint source control through proposed trading approaches or other mechanisms. When developing an integrated plan, a municipality/community must determine and define the scope of the integration effort, ensure the participation of entities that are needed to implement the integrated plan, and identify the role each entity will have in implementing the plan. EPA will continue to work closely with State and local governments to incorporate green infrastructure approaches to water quality within permits and enforcement actions, consistent with the practice over the past several years.
Plan Elements

An integrated program should be tailored to the size and complexity of the wastewater and stormwater infrastructure addressed in the plan. Although the details of each integrated plan will vary depending on the unique challenges of each community, an integrated plan generally should address the following elements:

Element 1: A description of the water quality, human health and regulatory issues to be addressed in the plan, including:

- An assessment of existing challenges in meeting CWA requirements and projected future CWA requirements (e.g., water quality-based requirements based on a new TMDL);
- Identification and characterization of human health threats;
- Identification and characterization of water quality impairment and threats and, where available, applicable wasteload allocations (WLAs) of an approved TMDL or an equivalent analysis;
- Identification of sensitive areas and environmental justice concerns; and
- Metrics for evaluating and meeting human health and water quality objectives.

Element 2: A description of existing wastewater and stormwater systems under consideration and summary information describing the systems’ current performance, including:

- Identification of municipalities and utilities that are participating in the planning effort and a characterization of their wastewater and stormwater systems; and
- Characterization of flows in and from the wastewater and stormwater systems under consideration.

Element 3: A process which opens and maintains channels of communication with relevant community stakeholders in order to give full consideration of the views of others in the planning process and during implementation of the plan.

- Municipalities developing integrated wastewater and stormwater plans should provide appropriate opportunities that allow for meaningful input during the identification, evaluation, and selection of alternatives and other appropriate aspects of plan development;
- Municipalities participating in an integrated wastewater and stormwater plan should, during the implementation of the plan, make pertinent new information available to the public and provide opportunities for meaningful input into the development of proposed modifications to the plan; and
- Where a permit or enforcement order incorporates green infrastructure requirements, the municipalities required to implement the requirements should allow for public involvement to assist in evaluating the effectiveness of the approach and to assist in successful implementation of the approach.
Element 4: A process for identifying, evaluating, and selecting alternatives and proposing implementation schedules which addresses:

- The use of sustainable infrastructure planning approaches, such as asset management, to assist in providing information necessary for prioritizing investments in and renewal of major wastewater and stormwater systems;
- The use of a systematic approach to consider and incorporate, where appropriate, green infrastructure and other innovative measures where they provide more sustainable solutions;
- Identification of criteria, including those related to sustainability, to be used for comparing alternative projects and a description of the process used to compare alternatives and select priorities;
- Identification of alternatives, including cost estimates, potential disproportionate burdens on portions of the community, projected pollutant reductions, benefits to receiving waters and other environmental and public health benefits associated with each alternative;
- An analysis of alternatives that documents the criteria used, the projects selected, and why they were selected;
- A description of the relative priorities of the projects selected including a description of how the proposed priorities reflect the relative importance of adverse impacts on public health and water quality\(^3\) and the permittee’s financial capability;
- Proposed implementation schedules; and
- For each entity participating in the plan, a financial strategy and capability assessment that ensures investments are sufficiently funded, operated, maintained and replaced over time. The assessment of the community’s financial capability should take into consideration current sewer rates, stormwater fees and other revenue, planned rate or fee increases, and the costs, schedules, anticipated financial impacts to the community of other planned stormwater or wastewater expenditures and other relevant factors impacting the utility’s rate base. Municipalities can use as a guide the document “CSO Guidance for Financial Capability Assessment and Schedule Development,” EPA 832-B-97-004) or other relevant EPA or State tools.

Element 5: Measuring success - As the projects identified in the plan are being implemented, a process for evaluating the performance of projects identified in a plan, which may include evaluation of monitoring data, information developed by pilot studies and other studies and other relevant information, including:

- Proposed performance criteria and measures of success;
- Monitoring program to address the effectiveness of controls, compliance monitoring and ambient monitoring; and
- Evaluation of the performance of green infrastructure and other innovative measures to inform adaptive design and management to include identification of barriers to full implementation.

\(^3\) An example of an informal tool to help identify priorities is given by “Combined Sewer Overflow Guidance for Screening and Ranking”, EPA, August 1995. The guidance is available at http://www.epa.gov/npdes/pubs/own595.pdf.
Element 6: Improvements to the Plan

- A process for identifying, evaluating and selecting proposed new projects or modifications to ongoing or planned projects and implementation schedules based on changing circumstances; and
- In situations where a municipality is seeking modification to a plan, or to the permit or enforcement order that is requiring implementation of the plan, the municipality should collect the appropriate information to support the modification and should be consistent with Elements 1 – 5 discussed above.

IV. Implementation

Implementing an integrated approach to wastewater and stormwater management may require coordination between State and federal NPDES permit and enforcement authorities. EPA recognizes the importance of and encourages early coordination between NPDES States and EPA on key implementation issues that may arise in individual integrated plans. This will ensure that plans will not need to be revised in order for them to be implemented. State NPDES permit authorities should initiate discussions with EPA on their efforts to address integrated plans that raise issues associated with ongoing federal enforcement actions and when addressing the initial integrated plans developed in the State or when a permit may potentially present a novel approach. EPA and States will determine the appropriate roles of permit and enforcement authorities in addressing the regulatory requirements identified in the plan. As discussed below, elements of an integrated plan can be incorporated, where appropriate, into NPDES permits, enforcement actions, or both. Permit issuance and implementation of existing permit and enforcement requirements and activities shall not be delayed while an integrated plan is being developed.

Permits

All or part of an integrated plan can be incorporated into an NPDES permit as appropriate. Limitations and considerations for incorporating integrated plans into permits include:

- Compliance schedules for meeting water quality-based effluent limitations (WQBELs) in NPDES permits issued for discharges from publicly owned treatment works (POTWs) and/or combined sewer overflows need to be consistent with the requirements in 40 CFR section 122.47. Where appropriate, an NPDES permit authority may include a compliance schedule in a permit for WQBELs based on post July 1, 1977 State water quality standards provided the compliance schedule is “as soon as possible” and the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them. Compliance schedules in permits should prioritize the most significant human health and environmental needs first.

- Reopener provisions in permits consistent with section 122.62(a) may better facilitate adaptive management approaches.
Green infrastructure approaches and related innovative practices that provide more sustainable solutions by managing stormwater as a resource should be considered and incorporated, where appropriate, where they provide more sustainable solutions for municipal wet weather control.

Appropriate water quality trading may be reflected in NPDES permits (see EPA’s 2003 Water Quality Trading Policy).

Enforcement

EPA and the States may bring enforcement actions against municipalities to address noncompliance with the CWA. Enforcement tools include administrative orders, negotiated consent decrees, or other state formal enforcement actions that require compliance with various requirements under the CWA. All or part of an integrated plan may be able to be incorporated into the remedy of a federal or State enforcement action. Considerations for incorporating integrated plans into enforcement actions include:

- The integrated planning framework should ensure that all necessary parties to a consent decree or administrative order are involved (e.g. municipality, utility authority).

- When there is a history of long-standing violations without significant progress, enforcement is used to address past violations and establish a path for coming into compliance.

- Where an extended time frame is necessary to achieve compliance, enforcement orders should provide schedules for CWA requirements that prioritize the most significant human health and environmental needs first.

- How permitting and enforcement actions may be used in conjunction to ensure implementation of the integrated plans.

- Sufficient flexibility should be provided in enforcement orders to allow for adaptive management approaches.

- Green infrastructure approaches and related innovative practices that provide more sustainable solutions by managing stormwater as a resource should be considered and incorporated, where appropriate, where they provide more sustainable solutions for municipal wet weather control.

- Environmentally beneficial projects that are identified in an integrated plan and which the municipality is not otherwise legally required to perform, such as water conservation measures, may be included in a settlement agreement consistent with EPA’s Supplemental Environmental Projects Policy.

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ATTACHMENT B

INTEGRATED MUNICIPAL STORMWATER AND WASTEWATER PLANNING

Frequently Asked Questions

July 15, 2013
Integrated Municipal Stormwater and Wastewater Planning

Frequently Asked Questions

July 15, 2013

Enforcement

1. For a municipality that already has an existing federal consent decree, can the remedy and its affordability be reexamined, under the Integrated Planning Approach?

Yes. The EPA is always willing to work with all parties to a federal consent decree to consider requests to modify the terms based on new and relevant information that can improve the remedies. Those who wish to propose amendments to existing consent decrees to incorporate a more integrated approach should provide the EPA with sufficient information and analysis to determine whether an Integrated Planning Approach makes sense based on sound science and appropriate technical and financial analyses. The recently released “Integrated Planning Framework” spells out what elements would be needed for implementation of these approaches.

2. How will the Integrated Planning Framework affect ongoing consent decree negotiations?

The EPA views ongoing consent decree negotiations as opportunities to work with municipal permittees that want to take a more integrated approach to their Clean Water Act (CWA) obligations and challenges. Any Integrated Planning Approach must ensure compliance with the CWA. The principles and elements of the Integrated Planning Framework will serve as a guide for negotiating consent decrees to address multiple CWA obligations with the underlying goal of ensuring that the projects with the greatest environmental and human health outcomes are completed first.

3. Why is the EPA continuing to list CSOs and SSOs as an enforcement priority if it recognizes that many communities are experiencing financial and budgetary constraints and often cannot afford to do the work required of them?

The EPA’s mission is to protect human health and the environment. When CSOs and SSOs occur, raw sewage can be discharged into local waters and into people’s basements. Raw sewage contains pathogens that threaten public health, and can lead to beach closures or public advisories against fishing and swimming. Every three years, the EPA sets national enforcement priorities to focus enforcement resources and expertise on serious pollution problems affecting communities. The EPA will continue to work with communities to address those threats within the constraints of the communities’ financial capability.
4. Is this Integrated Planning Approach laying the foundation for the EPA to expand its enforcement program and the reach of its enforcement actions?

No. Adopting an Integrated Planning Approach to CWA obligations is voluntary. This effort is a collaborative one between EPA, NPDES permit authorities and EPA and State enforcement officials. The intent is to use the flexibilities in both permits and enforcement to work with communities towards common goals.

5. Can the EPA emphasize the permitting process to make progress, rather than using enforcement?

The EPA believes that all tools available under the CWA should be part of the solution. Part of the Integrated Planning Framework is an enhanced focus on finding ways to use permits and enforcement in complementary ways to help move communities towards meeting CWA obligations. As the EPA implements the Framework, the Agency hopes and expects to explore the ways that permits can legally and effectively be used to reach those CWA goals.

Permitting

1. Will the EPA consider issuing one permit that addresses a community’s MS4 and POTW requirements? How will it work?

The Agency is open to considering different permitting options to implement Integrated Plans, including issuing one permit that addresses MS4 and POTW requirements where the permittee has responsibility for both. The issuance of multiple permits can also be coordinated in such a way as to be consistent with the goals and expectations of a municipality’s Integrated Plan.

2. Under what circumstances can compliance schedules be included in permits?

Compliance schedules in NPDES permits must be consistent with the requirements in 40 CFR section 122.47. The use of compliance schedules in NPDES permits for implementing water quality-based effluent limitations (WQBELs) will depend on the relevant State water quality standards. Under the CWA, a permit may contain a compliance schedule for WQBELs based on post July 1, 1977 State water quality standards provided the schedule achieves compliance “as soon as possible” and the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow such schedules. Many states that have such provisions in place also limit the length of compliance schedules that may be included in permits. If a schedule of compliance is deemed “appropriate” under 122.47 and its term exceeds one year, the permitting authority must include interim requirements and the dates for their achievement. 40 CFR section 122.47(a)(3). Where a compliance schedule exceeds the 5 year term of the permit, the permit must include final effluent limitations in order to ensure enforceability of the compliance schedule consistent with CWA Section 502(17) and 40 CFR 122.2. The framework for addressing compliance schedules in permits is explained *In the Matter of Star-Kist Caribe*, Inc. 3 E.A.D 171, 175, 177 (1990). Further
guidance on issuance of compliance schedules can be found in the EPA’s May 10, 2007 memorandum entitled “Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits.” (The memorandum is available at http://water.epa.gov/lawsregs/guidance/wetlands/upload/signed-hanlon-memo.pdf).

3. Why not utilize permits instead of enforcement for compliance schedules?

The circumstances facing each community are different. Under some circumstances, compliance schedules in permits may be appropriate. In other circumstances, enforcement, which provides greater flexibility for establishing compliance schedules, will be appropriate. In some situations, a combination of approaches might work. Compliance schedules in NPDES permits must be consistent with the requirements in 40 CFR section 122.47, as discussed above.

Where the municipality is not in compliance with the CWA, the NPDES authority and EPA have discretion to bring an enforcement action. Where there have been long standing violations without significant progress, enforcement will continue to be a valuable tool. Enforcement can provide a long term schedule that provides certainty that many communities are seeking and flexibility to allow longer term compliance schedules.

The aim of the EPA is to find a solution that protects human health and the environment, and tackles the most important problems first in a way that makes sense and is affordable. The framework the Agency has adopted encourages those flexibilities, and especially lower cost approaches that are also effective, such as green infrastructure solutions. The Agency has found answers that work for communities in recent agreements, and it will continue to work to achieve that goal.

4. The framework says an Integrated Plan “can be incorporated, where appropriate, into NPDES permits, enforcement actions, or both.” How is it determined what is appropriate?

Permits play a central role in implementing NPDES requirements. NPDES permits should clearly state the requirements necessary for the permittee to comply with the CWA. As discussed in more detail in the answer to question 2 of this section, where appropriate, an NPDES permit authority may include a compliance schedule in a permit for WQBELs based on post July 1, 1977 State water quality standards provided the compliance schedule is “as soon as possible” and the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them. Factors that may be considered include the nature of the modifications, operations or measures necessary to reach compliance, the time frame needed to complete the work, the length of time the discharger has already had to meet WQBEL(s) under past permits and the length and severity of any past non-compliance, the level of good faith displayed by the permittee in pursuing compliance, and other case-specific circumstances. If a permit contains multiple compliance schedules, the compliance schedules should prioritize the most significant human health and environmental needs first.
Financial Capability

1. When a community is preparing a Financial Capability Assessment, can it include both the municipal wastewater and stormwater costs?

Yes. It is entirely appropriate for communities to consider the financial impacts of investments they need to manage both stormwater and wastewater discharges. The assessment of the community’s financial capability may take into consideration current sewer rates, stormwater fees and other revenue, planned rate or fee increases, and the costs, schedules, anticipated financial impacts to the community of other planned stormwater or wastewater expenditures and other relevant factors impacting the utility’s rate base. The EPA encourages municipalities to use the 1997 “CSO Guidance for Financial Capability Assessment and Schedule Development” (EPA 832-B-97-004) (“Guidance for Financial Capability Assessment”) as a guide.

2. Can drinking water needs and costs be considered under the Integrated Planning Framework?

While costs for drinking water treatment and distribution would not be used to estimate metrics such as the residential indicator identified in the EPA’s Financial Capability Assessment guidance, the financial burden associated with projects not required by the CWA may be considered when evaluating the overall financial health of a community. In this context, all financial burdens faced by the community (including costs associated with environmental projects other than those required by the CWA) may be relevant to schedule development under a municipality’s Integrated Plan. EPA is open to considering a Drinking Water Investment Plan to complement the CWA Integrated Plan.

3. Will the EPA consider environmental compliance costs across media (water, air, and land issues) collectively in an Integrated Plan?

While costs for complying with air and land requirements would not be used to estimate metrics such as the residential indicator identified in the EPA’s Financial Capability Assessment guidance, the financial burden associated with projects not required by the CWA may be considered when evaluating the overall financial health of a community. In this context, all financial burdens faced by the community (including costs associated with environmental projects other than those required by the CWA) may be relevant to schedule development under a municipality’s Integrated Plan.

4. When evaluating costs of implementing an Integrated Plan, how will the financial capability of utilities and the communities they serve be determined?

A community’s financial capability and other relevant factors are important when developing appropriate compliance schedules that ensure human health and environmental protection. As the EPA and states implement the June 5, 2012, Integrated Municipal Stormwater and Wastewater Planning Approach Framework, EPA’s Guidance for Financial Capability Assessment will continue to be a valuable guide for evaluating the level of burden placed on a community by necessary clean water investments. The
guidance identifies a number of financial capability indicators that are considered in developing compliance schedules and it encourages permittees to submit any additional documentation that would create a more accurate and complete picture of their financial capability. This approach allows for the consideration of current local economic conditions when compliance schedules are being developed. As articulated in the January 18, 2013 memorandum “Assessing Financial Capability for Municipal Clean Water Act Requirements,” the EPA continues to work closely with local governments to clarify how the financial capability of community will be considered when developing schedules for municipal projects necessary to meet CWA objectives.

5. Are all communities required to spend 2% of the median household income (MHI) of the community to participate in the Integrated Planning process?

No. The EPA’s Guidance for Financial Capability Assessment suggests using the percentage of MHI as one indicator for helping to determine the schedule for completing necessary work. The MHI indicator is one of many considerations that EPA and NPDES States evaluate in determining the most appropriate schedule. The EPA expects that a full range of financial indicators and municipal-specific information will be considered when developing compliance schedules for inclusion into a permit or enforcement order. The MHI calculation is guidance, and is considered along with a suite of other financial indicators to assess the overall burden on a community. The guidance recommends that communities with higher burdens be given longer time periods to complete needed work. Municipalities are encouraged to provide additional financial information if they feel the EPA guidance is not adequately considering their unique financial considerations.

6. Will the EPA assist in funding the development of Integrated Plans, especially for smaller or less advantaged communities which may have trouble paying for the planning?

In general, grant funds for preparing an Integrated Plan are not available. However, a Clean Water State Revolving Fund can provide financial assistance to planning projects that have a reasonable prospect of resulting in eligible capital projects. (For additional information, see http://water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm). This eligibility could extend to integrated wet weather pilot projects. While it can be difficult for some communities to dedicate funds to planning, the EPA believes that some of the greatest opportunities to reduce overall costs come from up-front spending on planning activities.

7. Can a municipality include the ongoing cost for infrastructure rehabilitation and improvements in an Integrated Planning Approach?

Yes. However, where the cost of this work is included in the approach and impacts the pace of achieving compliance, communities may need to make commitments to demonstrate that the infrastructure improvements are taking place. The EPA also expects municipalities to conduct the routine maintenance necessary to avoid having the performance of the infrastructure deteriorate.
8. Stormwater utilities have worked very well where implemented. How can this impact the integration?

Stormwater management has historically been supported by a range of funding methods and mechanisms, including utilities (see “Guidance for Municipal Stormwater Funding,” 2006, National Association of Flood and Stormwater Management Agencies). EPA strongly supports utilities, as they can provide dedicated sources of funding for stormwater programs.

9. Does the EPA consider life cycle costs of compliance solutions or only construction costs?

The EPA supports the use of life cycle costs in evaluating alternatives as part of an Integrated Plan. Life cycle costs are the net present value of all costs for a project over its lifetime, including primary project costs, secondary financing costs, operations and maintenance and the cost of rehabilitation, repair and replacement. One of the principles to guide the development of an Integrated Plan that is identified in EPA’s 2012 Integrated Planning Framework document is to evaluate and incorporate, where appropriate, effective sustainable technologies, approaches and practices in Integrated Plans where they provide more sustainable solutions for municipal wet weather control. In February, 2012, the EPA released “Planning for Sustainability: A Handbook for Water and Wastewater Utilities.” The Handbook describes a number of steps utilities can take to build sustainability considerations into their existing planning processes and make the best infrastructure choices that protect water quality and ensure the long-term sustainability of infrastructure assets. The Handbook recommends that, when evaluating alternatives for wastewater controls, municipalities assess the full life cycle costs of each alternative to provide a full accounting of the project’s annualized cost and revenue impacts.

General

1. Will the Integrated Planning Approach lessen regulatory standards or provide regulatory relief?

The Integrated Planning Approach will not change or lessen existing statutory or regulatory standards. Rather, the approach will take advantage of the flexibilities in existing EPA regulations, policies and guidance to allow municipalities to sequence implementation of their CWA obligations to protect water quality and public health. Municipalities developing integrated wastewater and stormwater plans should provide appropriate opportunities that allow for meaningful input from relevant community stakeholders during the identification, evaluation, and selection of alternatives and other appropriate aspects of plan development. For municipalities with an existing consent decree, the EPA is always willing to consider a request to modify existing plans to incorporate cost-effective innovative approaches that

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achieve comparable and measurable results as evidenced by recent modifications to agreements with Indianapolis, IN (see http://www.epa.gov/compliance/resources/cases/civil/cwa/cityofindy-0610.html) and Toledo, OH (see http://www.epa.gov/compliance/resources/cases/civil/cwa/toledo.html).

2. **What is the role of Green Infrastructure and other innovative solutions?**

The EPA embraces green infrastructure and other innovative solutions to address wet weather water quality problems and is working to promote these types of solutions to manage wet-weather related events in an efficient and cost-effective way which can also help revitalize urban areas. Green infrastructure provides multiple benefits in meeting CWA obligations, while also providing other benefits to enhance the livability of communities. As communities seek more integrated approaches to CWA obligations, EPA expects that green infrastructure approaches will commonly be considered and employed resulting in more sustainable communities and the creation of green jobs.

3. **Who determines what the most pressing water quality needs of a community are?**

Under the Integrated Planning process, municipalities would have an opportunity to develop an Integrated Plan that identifies the municipality’s priorities and provides support for their recommendations. The Plan should describe the water quality and human health issues the community faces, along with other information, including a detailed description of alternatives considered and the criteria used for evaluating them. The Plan can then be considered in permitting and enforcement discussions (see below).

4. **Are Integrated Plans legally binding?**

An Integrated Plan developed by a municipality, by itself, will not establish legally binding requirements. The EPA anticipates that Integrated Plans should provide all the pertinent information, including the appropriate analyses necessary to develop appropriate schedules for implementing measures and actions necessary to comply with CWA requirements. Once a municipality has developed a Plan, the EPA or State NPDES authority will work with the municipality to develop any appropriate enforceable requirements and compliance schedules in permits and/or enforcement orders.

5. **How does a municipality “qualify” for Integrated Planning?**

There are no set qualifications to be met to take advantage of the Integrated Planning process. The Integrated Planning Approach is optional and the responsibility to develop an Integrated Plan rests with municipalities. Municipalities developing Integrated Plans should provide relevant community stakeholders with appropriate opportunities that allow for meaningful input during plan input. EPA encourages early coordination between municipalities developing a Plan, NPDES States and EPA on key implementation issues. Once a municipality has developed a plan, the NPDES permit and/or enforcement authority will work with the municipality as necessary to develop the
appropriate means for applying applicable legal requirements and implementation schedules.

6. Will all communities be required to use this Integrated Planning Approach?
   No. This is not a mandatory approach. The intent is to promote the Integrated Planning Approach as a cost-effective and innovative way for communities to achieve water quality objectives.

7. Will the agency be selecting pilot communities to use the framework?
   The Agency and relevant NPDES state authorities will work with any municipality that comes forward with an Integrated Plan. The Agency will work to highlight key aspects of well thought out Integrated Plans so that others may benefit from those successes.

8. How can communities proactively ensure that the plan they develop will be acceptable to regulators?
   The EPA recognizes the importance of and encourages early coordination with and between NPDES States and the EPA on issues that may arise in individual Integrated Plans. This will reduce the need for plans to be revised in order for them to be implemented. The Integrated Planning Framework document encourages State NPDES permit authorities to initiate discussions with the EPA on their efforts to address Integrated Plans, especially for the first Integrated Plans developed in the State, as well as when: 1) the Plan raises issues associated with ongoing federal enforcement actions; or 2) the State is considering incorporating a novel approach into a permit. The EPA and States will work with communities to determine the appropriate roles of permit and enforcement authorities in addressing the regulatory requirements identified in the plan.

9. What is the EPA doing to ensure that Integrated Planning is approached consistently by each of its offices?
   The EPA has worked extensively with its Regional Offices in developing the framework. The Regional Offices participated in the public workshops that were used to gain input on the draft framework. EPA Headquarters is in regular communication with the Regions and all parts of the Agency are committed to ensuring that the Integrated Planning Approach is appropriately implemented in a way that acknowledges the varying nature of site specific approaches.

10. Will the EPA be coordinating with state agencies when a municipality expresses interest in using an Integrated Planning Approach?
    Yes. The EPA recognizes the importance of and encourages early coordination between NPDES States and the EPA on issues that may arise in individual Integrated Plans. The EPA encourages municipalities seeking to have Integrated Plans implemented through
permit provisions to contact their NPDES authority early in the process of developing a Plan. Where the EPA is the NPDES permitting authority, it will notify the State and coordinate on appropriate activities, such as TMDL development (see response to question 16 of this section below).

For municipalities where Integrated Plans are in the context of Federal enforcement, the EPA will coordinate with the State to the degree appropriate to implement the approach.

11. Can street sweeping and pollution prevention programs be included as elements of Integrated Plans?

Yes. Street sweeping and pollution prevention programs typically are required under MS4 and CSO permits. When a permittee identifies such controls as an element of an Integrated Plan, the permittee should provide projected pollutant reductions along with projected benefits to receiving waters and other environmental and public health benefits associated with the alternative.

12. Can non-NPDES efforts such as preserving buffer areas be considered under the Integrated Planning Approach?

Yes. Integrated Plans may address nonpoint source controls that protect surface water supplies, such as preserving buffer areas, through proposed water quality trading approaches or other mechanisms.

13. What assurance can you provide that the EPA will allow communities to use green infrastructure solutions in addressing their CSOs?

The EPA is committed to promoting green infrastructure approaches wherever they are appropriate. The recent permit and agreements with the communities listed below are good examples of the EPA’s engagement and support in seeking green infrastructure solutions.

- Milwaukee Metro Sewerage District (the permit is available at http://www.mmsd.com/AssetsClient/documents/MMSD_Permit_Final_1_8_2013.pdf);
- Cleveland (the consent decree is available at http://www.epa.gov/compliance/resources/cases/civil/cwa/neorsd.html);
- Kansas City (the consent decree is available at http://www.epa.gov/compliance/resources/cases/civil/cwa/kansascity.html);
- St. Louis (the consent decree is available at http://www.epa.gov/region07/enforcement_compliance/MSD_consent_decree_cwa.htm);
- Cincinnati/Hamilton County (the consent decree is available at http://www.epa.gov/compliance/resources/decrees/civil/cwa/hamilton-cd2.pdf); and
• Louisville (the consent decree is available at http://www.epa.gov/compliance/resources/cases/civil/cwa/louisville.html).

• Chattanooga (the consent decree is available at http://www.epa.gov/enforcement/water/cases/cityofchattanooga.html)

14. Can an Integrated Plan address multiple water quality problems?

Yes. The Integrated Planning process is a comprehensive planning process that seeks to address all of a community’s CWA related obligations while prioritizing those with the greatest human health and environmental consequences. An assessment of existing water quality challenges in an Integrated Plan may identify multiple pollutants (e.g., pathogens, nutrients, suspended solids) that impair water quality and multiple sources for these pollutants (e.g., wastewater or stormwater). In such cases, an Integrated Plan should include a description of the proposed relative priorities of the projects selected, including a description of how the proposed priorities reflect the relative importance of adverse impacts on public health and water quality.

In a situation where a community’s Integrated Plan addresses water quality impairments caused by pollutants from multiple permitted community wastewater and/or stormwater discharges, the EPA believes it is appropriate for the permitting authority to consider, among other factors, the implementation priority assigned by the community to the various remedial projects identified in the Integrated Plan. Of course, it is important that the Integrated Plan prioritize those projects that address the most significant human health and environmental needs.

15. How will water quality issues that are driven by conditions outside the local or state jurisdiction be dealt with especially with regard to priorities, monitoring and measures of success?

One of the early steps in developing an Integrated Plan is to define the scope of the issues that the Plan will seek to address. That can include partnerships with any relevant entity that impacts or could help to address water quality issues within the community. It may not always be possible to have all entities involved in the Plan. The scope of participation is likely to be different in each case, and each Integrated Plan will address the issues that the participants determine can and should be included.

16. How can existing and anticipated TMDLs be incorporated into Integrated Plans?

TMDLs identify pollutant reduction targets for sources that contribute to water quality impairments. To implement TMDLs permitting authorities can require municipalities to meet lower effluent targets necessitating investments to remain in compliance. As it sets priorities and schedules for sequencing actions to meet multiple CWA obligations, an Integrated Plan can incorporate these and other investments necessary to implement final and anticipated TMDLs to provide enough certainty to allow for appropriate investment. However, the need to develop a TMDL does not justify or support delaying investments to meet other known requirements.
ATTACHMENT C

OUTLINE OF SANTA MARIA INTEGRATED PLAN
OUTLINE OF SANTA MARIA INTEGRATED PLAN

I. Introduction and Scope of the Plan
   A. Problem Statement
   B. Summary of Integrated Planning Proposal
   C. Area Covered by the Plan

II. The Santa Maria Valley Watershed and Water Management System
   A. Santa Maria Valley Watershed
      1. Climate and Topography
      2. Soils
      3. Land Use
      4. Surface Waters and Sub-watersheds
      5. Groundwater
   B. The Water Management System
      1. Flood Control and Storm Water Management
         a. Channels and Ditches
         b. Detention and Recharge Basins
      2. Wastewater Management
         a. Conveyance System
         b. Treatment Plant
      3. Water Supply Management, Including Groundwater
         a. Imported Water
         b. Groundwater

III. Assessment of Water Quality and Water Quality Requirements
   A. Water Quality
      1. Surface Water Quality
a. Santa Maria River
b. Storm Water Channels

2. Groundwater Quality

B. Water Quality Requirements

1. Phase II Permit
2. Post-Construction Requirements
3. Total Maximum Daily Loads
   a. FIB
   b. Nutrient
   c. Pesticide
   d. Salts
4. POTW WDR
5. Water Supply and Clean Drinking Water Act
6. Groundwater Management
7. Landfill Operations/Industrial Permit
8. Construction Permit
9. Section 404/401 Permits

IV. Stakeholder Involvement and Public Education

A. Initial Identification of Stakeholders
B. Stakeholder Involvement in Plan Development Process
C. Stakeholder Involvement in Plan Implementation
D. Stakeholder Involvement in Plan Amendments

V. Integrated Approach to Water Quality Requirements

A. Continuation of Core Program and Technology-Based Requirements
   1. Stormwater
a. BMPs
b. MGs

2. Wastewater

B. Water Quality Management through City’s Detention, Retention and Water Quality Basins

1. Current and Future Water Quality Benefits

2. Improvements to Existing System

a. Pollutant Removal Systems
b. Improved Infiltration Capacity
c. Expansion to System

3. Compliance with Existing Water Quality Requirements through Basin System

4. Implementation Schedule

5. Cost Estimates

6. Financial Strategy

C. Groundwater Quality Management

D. Compliance with other Water Quality Requirements

VI. Integrated Monitoring

A. Core Program Monitoring

B. Technology-Based Requirement Monitoring

C. Watershed Monitoring

VII. Effectiveness Assessment and Adaptive Implementation

A. Core Program and Technology-Based Requirements

B. Watershed-Based Requirement

C. Final Compliance Determinations