



City Planning Commission



|                 |                |
|-----------------|----------------|
| Date            | <u>9/8/16</u>  |
| Tracking Number | <u>16-2027</u> |

# MASTER PLAN APPLICATION

## APPLICATION FOR AMENDMENT TO PLAN FOR THE 21ST CENTURY: NEW ORLEANS 2030 (THE MASTER PLAN)

**Complete Application Required:** Use this form for all requests to amend Plan for the 21st Century: New Orleans 2030 (the Master Plan). The City will not process an application that does not have all the required items. To accept your application, each of the items listed under Required Components must be submitted at the same time.

**Early Consultation:** Prior to submitting an application, the applicant is required to set up a pre-application conference meeting with a City Planner to discuss the proposal. City Planning staff will provide the applicant with assistance and information on the application feasibility, decision criteria, review time, and whether a Neighborhood Participation Program (NPP) meeting is required.

**Application Acceptance:** All applicants are required to bring in one copy of the application package for informal review by a staff planner, prior to the formal application to ensure that the application is complete. Applications will be accepted at the City Planning Commission between 8:00 AM and 5:00 PM Monday through Thursday and between 8:00 AM and 3:30 PM Friday. No appointment is necessary for the formal application submittal; however, an appointment with a City Planner is necessary for the early consultation. Mailed, faxed or e-mailed applications will not be accepted.

**Purpose:** The Master Plan is a long-term vision for the future of New Orleans. It contains policy recommendations across a spectrum of topics, but with a particular focus on the built environment. Amendments reflecting updated information, changing trends, best practices, or community goals are generally either text changes or revisions to the Future Land Use Map (FLUM). Text amendments affect the policies of the comprehensive plan on a City-wide level. Map amendments influence the potential uses and development of specific properties. A FLUM amendment may affect a site's zoning designation when zoning is revised comprehensively or when a zoning change application is submitted. Text and map amendments must be consistent with the overall policy intent of the Master Plan. Justification for the change(s) within the context of the Master Plan is the responsibility of the applicant.

**When to Apply and Process:** In 2016, the amendment application period will begin on April 25th and close on August 31st. Once the amendment application packet is submitted for review, the City Planning Commission will arrange a public meeting and publish a notice in a local newspaper of general circulation at least fifteen days in advance of the meeting. In addition to the public meetings, the City Planning Commission will hold a public hearing(s) to approve, approve with modifications, or disapprove the proposed amendments. A staff report and recommendations will be available to aid the discussion. The Planning Commission's recommendation will be forwarded to the City Council for final disposition.

### REQUIRED COMPONENTS

#### Amendment to Text of Master Plan

- Completed application form
- Reasons for change may address the following criteria:
  - Public benefits from the proposed change
  - Health, safety & welfare
  - Evaluation of current public policy
  - Other factors
- FEE: \$1,500 (Only applies to Descriptions of Future Land Use Categories of Ch.14,Sec.C)

#### Amendment to Future Land Use Map

- Completed application form (must be the property owner)
- Neighborhood Participation Program Report (see NPP Resource Guide)
- Reasons for change may address the following criteria:
  - Change in land use trends
  - Impacts on neighboring property
  - Evaluation of existing zoning classification & the current future land use classification
  - Public benefits from the proposed change
  - Health, safety & welfare
  - Other factors
- Photographs of subject site
- FEE based on table below

Accepted forms of payment include check, cashier's check, money order, Visa, MasterCard, & Discover.

|                         |         |                           |         |
|-------------------------|---------|---------------------------|---------|
| Lots 0-4,999 sq ft      | \$1,000 | Lots 25,000-74,999 sq ft  | \$3,000 |
| Lots 5,000-24,999 sq ft | \$2,000 | Lots 75,000 sq ft or more | \$4,000 |

### TO BE COMPLETED BY CPC STAFF

Intake Planner SPK Date Received 9/8/16  
 Amount Received 1500 Planning District \_\_\_\_\_



City Planning Commission



|                       |
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# MASTER PLAN APPLICATION

## REQUEST FOR CHANGE IN TEXT OF MASTER PLAN REQUESTS OPEN TO ALL RESIDENTS

For text amendment changes, including changes to graphics, tables, or maps, the applicant must provide the chapter as well as the page number of the amendment that the applicant wishes to change. Proposed additions to the text should be underlined; proposed deletions from the text should be indicated by strikethrough. If the change is for a graphic, table, or map other than the Future Land Use Map(s), indicate the volume, chapter, and page number along with the title of the graphic, table, or map.

Volume II, III Chapter(s) multiple Page No(s) see attached Title(s) see attached

**Attach a copy of current graphic, table, or map, if applicable.**

Specific proposed change to text (if necessary, applicant may submit additional sheets):

See attached summary letter and proposed text amendments.

## REQUEST FOR CHANGE TO FUTURE LAND USE MAP

MAY BE REQUESTED BY OWNER OF PROPERTY(S)

For a change to a Future Land Use Map, there must be a clear description and map of the boundaries. The request should indicate the present Future Land Use Map designation and the designation that is being requested for the area. If more than one category is being requested, precise boundaries of each requested land use designation must be described and indicated on maps. A statement describing the reasons for the requested change must be included in the application.

Boundaries of Area (A separate application is needed for each non-contiguous property) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Municipal Address(es) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Square Number(s) \_\_\_\_\_ Lot Number(s) \_\_\_\_\_

Tax Bill Number(s) \_\_\_\_\_

Square footage of area \_\_\_\_\_

Future Land Use Map Designation (current status) \_\_\_\_\_

Proposed Future Land Use Map Designation \_\_\_\_\_





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# MASTER PLAN APPLICATION

## ACKNOWLEDGMENTS

If ownership is joint, each owner must be listed. If multiple squares, then applicants must own not less than 50% of the land for which the amendment is requested. If ownership is a partnership, the Partnership Agreement must be included. If ownership is a corporation, Articles of Incorporation and a Board Resolution authorizing an individual or agent to sign on its behalf. If ownership is an LLC, Articles of Organization and legal documentation authorizing an individual or agent to sign on its behalf must be included. If necessary, applicant may be required to submit proof of ownership documents, such as copies of a recorded act of sale, act of exchange, act of donation, or other documents.

I (we) hereby affirm that ownership and property information presented on this application is current and accurate and I (we) acknowledge that inaccurate or incomplete ownership, improper authorization, or property identification will make this application and resulting actions null and void. I (we) the undersigned owner or authorized agent of the area of land described above, hereby submit for your approval the above-stated request.

Applicant Signature *Mathaoff* Date 9/8/17

Applicant Signature \_\_\_\_\_ Date \_\_\_\_\_

(Notarization is only required for application subject to a fee.)

STATE OF LOUISIANA, PARISH OF ORLEANS

Before me, the undersigned authority, personally appeared the person(s) whose signatures are affixed above, all of the full age of majority, who declared under oath to me, Notary, that they are the owners or authorized agents of the property described above, and that their signatures were executed freely and voluntarily and that they are duly qualified to sign.

Sworn and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_ .

My Commission Expires \_\_\_\_\_

**GREATER  
NEW ORLEANS  
WATER  
COLLABORATIVE**  
nolawater.org

Sept. 8, 2016

City of New Orleans  
Planning Commission  
Robert Rivers, Director  
1300 Perdido St.  
New Orleans, LA 70112

Dear Robert Rivers,

Please accept the accompanying Master Plan amendment proposals submitted on behalf of the Greater New Orleans Water Collaborative. We appreciate the opportunity to provide constructive suggestions for the next iteration of this community-wide vision for the built and natural environment within New Orleans. In particular, I want to thank you and your staff members, Paul Cramer and Danica Adams, for providing guidance on the amendment process, germane topics and formatting. If you have any questions regarding our submission, or if I can be of assistance as the process continues, please let me know.

Greater New Orleans Water Collaborative is comprised of more than 200 architects, landscape architects, engineers, floodplain managers, educators, nonprofit advocates and neighborhood leaders. We hold in common a belief that New Orleans can leverage its water wealth to become safer, more beautiful and more prosperous. The breadth of expertise within the Water Collaborative has enabled us to produce a wide-ranging set of amendment proposals, which have been vetted by members and approved by our steering committee. Some themes emerged from our discussions:

***Harnessing our Water Wealth*** New Orleans hides too many of its waterways beneath streets and behind floodwalls. In preparing our comments, we mapped the city's waterfronts, wetlands and waterways—including miles of culverts and canals. We identified numerous opportunities to enhance public access to and understanding of water, including at the Algiers riverfront, Central Wetlands Unit, Palmetto Canal, London Avenue Canal, Lincoln Beach and the canal network in New Orleans East. Furthermore, we identified key corridors linking these assets. From the neutral ground of Elysian Fields to the space below I-10, these publicly owned corridors should be regarded as de facto water management zones to be enhanced with water elements and green infrastructure. Crescent Park and Lafitte Greenway provide vibrant models of how our city can leverage its water assets and better connect them while managing stormwater sustainably.

***Interagency Goal-Setting*** The ongoing Master Plan amendment process provides an opportunity to encourage coordination and communication among government agencies. The Master Plan can lift important plans out of agency silos and integrate them into overarching city policy (e.g., the city's Hazard Mitigation Plan and Resilience Strategy). It can emphasize coordinated goals and objectives such as using urban farms to retain stormwater while also reducing the inequity of food deserts. At present, the Planning Commission certifies that projects proposed for the 5-Year Capital Improvement Program or annual capital budget are "consistent with the goals, policies and strategies in one or more of the Master Plan's elements." Such scrutiny could be extended to private developments of a certain threshold and those receiving public incentives.

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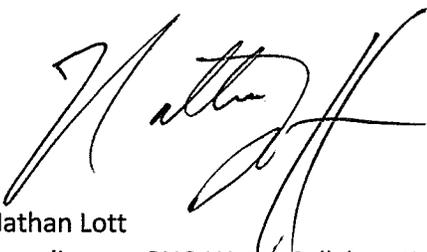
***Involving and Educating Residents*** Similarly, the Master Plan amendment process can help produce more responsive government and more informed citizenry by maximizing public participation. We encourage you to reach out to all residents of the city in advance of planned public meetings on amendments, making use of multiple communication tools in each neighborhood. Recognizing the presence of non-English speakers and a digital divide within New Orleans, the Planning Commission can work with faith-based organizations, community organizations, schools and workplaces to reach these residents.

***Linking Risk and Resilience*** In public meetings and in the plan itself, it is important to address flood safety alongside resilience. Although the city has a Hurricane Risk Reduction System, New Orleans is still at risk for flooding. Communication of this flood risk is essential for the protection of life and property. The Master Plan should make a concerted effort to use the clearest, most easily understood language. For example, the current plan consistently refers to the “100-year flood.” Research has shown that people understand this phrase less than “1% annual risk flood.” When identifying risk, it is also important to cite actions citizens can take in response, including insurance, evacuation and retrofitting property.

***Green Infrastructure Benchmarks*** A critical area of retrofit potential is green infrastructure, by which we refer not to parks and open space but to landscape features that provide onsite water retention and infiltration. Because these features mitigate flood risk, slow subsidence, and save energy, the Master Plan should include measurable green infrastructure goals – including goals for the retrofitting of existing development. In addition, the city can implement public green infrastructure projects more successfully if departmental functions are explained and responsibilities delineated. Finally, the identification of funding mechanisms (e.g. parcel fees, grants, revolving loan funds, etc.) could assist in the implementation of these projects.

These themes are translated into specific policies in the accompanying amendment proposals. Thank you again for the opportunity to provide input on the Master Plan, and please do not hesitate to contact me if I can provide clarification, case studies, resources or anything else.

All the best,



Nathan Lott  
Coordinator, GNO Water Collaborative

# GNO WATER COLLABORATIVE PROPOSED AMENDMENTS TO NEW ORLEANS MASTER PLAN

Narrative summaries are provided by chapter followed by proposed edits or additions in red. New goals are denoted with \*.

*Note:* Goal and page numbers from the existing Master Plan are provided for reference only. It is understood these may change in the new plan.

## Volume 2 -- Implementation

### Chapter 6: Historic Preservation

**Summary** The Master Plan recommended that “historic preservation initiatives support and invigorate neighborhood revitalization” and that New Orleans become “a model of ‘green’ sustainable historic preservation.” Going forward, it is important to recognize that any sustainable preservation initiatives should encompass on-site water management and flood risk reduction. Energy savings result from decreased reliance on pumped drainage and improved water management protects historic fabric from excess moisture and related building pathologies. Moreover, while FEMA allows a city to exempt historic structures from compliance with floodplain management requirements, consideration should be given to how mitigation measures can be implemented to reduce risk to these structures without jeopardizing their historic character. Given increasing risk, there is a growing national discourse on appropriate resilience retrofits in historic places, which presents natural leadership opportunity for New Orleans.

GOAL 3.A, P. 6.16

#### **Develop a “Sustainable Preservation” plan and pilot project.**

According to the U.S. Environmental Protection Agency, the construction industry produced 6 percent of total U.S. industrial greenhouse gas emissions in 2002 (the most recent year of analysis). Historic preservation is therefore an important component of carbon emissions reduction in the United States. Additionally, historic structures in New Orleans tend to be well-adapted to New Orleans’ ecology, making them inherently more resilient: Many are raised above the floodplain, and vernacular architectural features like the shotgun floor plan and elongated windows that characterize many historic New Orleans homes facilitate cross-breezes that decrease reliance on air conditioning. Even so, historic structures and neighborhoods may be vulnerable to the more intense storms and higher average temperatures associated with climate change, necessitating appropriate retrofits. ... Because of New Orleans’ national visibility as a treasure house of historic architecture and as an environmentally vulnerable location, the city could become a national model for sustainable preservation. In New Orleans, sustainable preservation should encompass on-site water management and green infrastructure because energy savings result from decreased reliance on pumped drainage and improved water management may protect historic fabric from excess moisture and related damage. To avoid perceived incompatibility between preservation standards and the city’s resilience goals, the city’s historic preservation agencies and non-profits should join with the U.S. Green Building Council (USGBC), which has a New Orleans affiliate, the American Institute of Architects, Make It Right, Global Green, Greater New Orleans Water Collaborative, the State Historic Preservation Office, National Trust for Historic

Preservation, FEMA and the National Center for Preservation Training and Technology to establish guidelines for appropriate resilience retrofits in historic settings. These guidelines should address energy efficiency, on-site water management, elevation and related issues.

#### RECOMMENDED ACTIONS

1. Form a committee to create a framework for a sustainable preservation program and funding request.

Who: HDLC; USGBC; AIA; SHPO; NCPTT; FEMA; other appropriate groups

When: First five years

Resources: Staff time; volunteers; grants

The program should include a plan to develop integration of green features and resilience measures into historic district regulations and funding for a pilot project to implement the plan. The committee should include members of both the historic preservation and green building communities familiar with best practices and incentive programs, and should make recommendations within 12 months of forming.

## Chapter 7: Green Infrastructure

**Summary** Volume 2, Chapter 7 focuses on “green infrastructure” defined as “New Orleans’ system of parks, open spaces, and recreation resources;” along with “the network of parks, tree-lined streets, bike trails and pedestrian paths, river and stream corridors, waterfronts, and urban wilds of the city.” Note, however, that the term “green infrastructure” as used by EPA and other entities refers to a class of landscape installations that allow stormwater retention and infiltration. While this section details goals and recommended actions for assuring green spaces improve recreation access and other quality of life aims, this chapter does not fully address the value of the city’s green spaces to reduce stormwater related flooding, runoff pollution, or subsidence. GNOWC’s overarching recommendation is that the principles of the City’s Urban Water Plan and other water management related policy aims be incorporated into the goals and recommended actions of this chapter.

GOAL 2.A, P.7.15-16

### **Promote tree planting on both public and private property.**

#### RECOMMENDED ACTIONS

1. Prepare a tree-canopy GIS layer and analyze it with appropriate tree-cover software to track values.

Who: Parks and Parkways; City GIS unit; Louisiana Urban Forestry Council (LUFC)

When: Medium term

Resources: La. Department of Agriculture and Forestry; Urban and Community Grants; Alliance for Community Trees Grant; Chevron Grants

2. Prepare a street tree master plan to plant street trees throughout the city.

Who: Parks and Parkways; City GIS unit; Louisiana Urban Forestry Council (LUFC)

When: Medium term

Resources: La. Department of Agriculture and Forestry; Urban and Community Grants; Alliance for Community Trees Grant; Chevron Grants

Public streetscape projects and commercial or mixed-use development or redevelopment projects should be required to provide street trees, where feasible. In addition to specifying the location of tree wells and landscape species, design documents for these projects should demonstrate adequate root growth area and rainwater supply available for each tree. When appropriate, technologies such as tree cells and pervious paving systems should be used to create conditions in which street trees thrive. Street tree criteria should be updated for different kinds of streets, appropriate species, planting and maintenance, and so on. The city should also have an updated and complete inventory of all street trees in GIS, which will help in maintenance and replacement of trees.

3. Promote tree preservation and planting on private property.

Who: Parks and Parkways; City GIS unit; Louisiana Urban Forestry Council (LUFC)

When: Medium term

Resources: La. Department of Agriculture and Forestry; Urban and Community Grants; Alliance for Community Trees Grant; Chevron Grants

Standards for new development should include requirements for planting trees, shrubs and ground cover, where appropriate. Large trees should be preferably preserved, but if they must be removed, several new trees should be planted to replace them. A compensatory mitigation program should be established to guarantee replanting of tree caliper equal or greater to that lost. This model could fund offsite plantings when appropriate. It could also be adapted to encompass heritage trees on properties not slated for development. Methods to help provide and promote tree preservation and planting can include continuing the ReLeaf program already operated by Parkway Partners and creation of community based or city led tree nurseries in vacant lots, with seedlings distributed in neighborhoods ...

6. Inventory the city's public trees and overall tree canopy. Identify as "heritage trees" those trees of native species, significant size (e.g. top 20% by caliper), located along public corridors. Use additional criteria as appropriate. Consider additional protections for qualifying trees and appropriate incentives for their retention.

Who: Parks and Parkways

When: Medium term

Resources: La. Dept. of Agriculture and Forestry and Community Grants; Alliance for Community Tree Grants; Chevron Grants

GOAL 2.D, P.7.17

**Establish storm water management planting practices in public green spaces.**

RECOMMENDED ACTIONS

1. Replace most lawn areas in neutral grounds and street sides with bioswales, plantings and appropriate green infrastructure, when necessary amending the soil to accommodate increased rainwater detention.

Who: Parks and Parkways; S&WB; DPW; nonprofit partners

When: Medium term

Resources: Staff education and training; grants for public awareness; grow plants in nursery

> Develop a comprehensive design and investment plan for the Departments of Public Works and Parks & Parkways. This plan should detail stormwater best management practices for neutral grounds, intersections, rights of way, etc. as well as long-term maintenance protocols for the prescribed green infrastructure installations. The plan should include specific project commitments and establish new default designs for road or utility projects that disrupt neutral grounds. It should be completed within two years of amending the Master Plan accordingly.

GOAL 3.A.1, P.7.18

Because it is often difficult to acquire land to create new parks, the overall amount of city land devoted to parks and open space should, at a minimum, remain the same. That means that no park land should be transferred to another use or sold without provision for the same amount or more land being designated as new park land. Adapting park land for improved stormwater management through landscape design is not to be considered a new use, as this is an historic function of open space in the city. However, development of buildings, parking lots and other structures atop publicly owned open space, ought to be offset by the acquisition of new publicly owned open space. State Act 378 provides that designated park land (what constitutes "designation" is not described) cannot be taken out of park uses without the written approval of 70 percent of the property owners within a radius of 300 feet of the park.

...

Any park land sold or taken for other uses, including other municipal uses, must be replaced by land with similar park, recreation or conservation value in terms of usefulness and location. When open space is developed for a beneficial or recreational use (e.g. park office, rec center, etc.), its conservation value may be lost or degraded. In such cases, the city should seek to replace the acreage in order to retain a net balance of public open space. If the land is not available, funds must be deposited in a Parks and Recreation Trust Fund or similar dedicated account (described below) that would be sufficient to buy replacement land at fair market value. ...

GOAL 3.A.3, P.7.19

### **Establish systems to ensure that the city does not lose acreage dedicated to parks**

#### RECOMMENDED ACTIONS...

3. Evaluate any public property identified for sale to identify suitability as a park or recreation site.

Who: Parks and Parkways; City Attorney; City Council; S&WB; DPW; NORA

When: Medium term

Resources: Staff time

Before public land is put up for sale, it should be reviewed by the CPC, NORD, and Parks and Parkways to see if it is suitable for an identified park or recreation need in that location or for stormwater retention to benefit neighborhood drainage or flood-risk reduction.

GOAL 5, P.7.21

### **MORE PUBLIC ACCESS TO WATERFRONTS**

For a city surrounded by water, New Orleans has a limited amount of public open space at its waterfronts. More access to the waterfront has been a goal for almost 20 years. While some progress has been made, great potential remains. In addition to the Mississippi River and Lake Pontchartrain, New Orleans' bayous, canals and wetlands represent important water assets. Landscape features for water management, such as along Lafitte Greenway and in NORA Stormwater Lots, are similarly valuable. Linking people to these water assets with trails, pocket parks, overlooks, etc. and linking these assets together with greenways, bike lanes, pedestrian bridges, etc. enhances quality of life. In many cases, such linkages can be paired with green infrastructure to recharge groundwater and improve water quality.

- 5.A Create parks and public spaces along the Mississippi River, Lake Pontchartrain and other waterways and wetlands

#### RECOMMENDED ACTIONS...

3. Enhance the amenity value of canals and drainage assets when possible.

Who: Levee Board; OFICD; S&WB; DPW; Parks and Parkways

When: First five years

Resources: Levee resources and capital budget

Today, most of the canals and drainage facilities in New Orleans are unattractive, if they are visible at all, and residents experience water more as a threat than as an amenity. The *Greater New Orleans Urban Water Plan* calls for the daylighting of some existing canals and maintenance of higher water levels within canals to reduce the dewatering of soils, which is known to aggravate subsidence. In addition to making sure that any canals function correctly for water management, it is important that they be designed as an attractive addition to the city's open space. Likewise, a new generation of green infrastructure drainage assets should contribute to urban design goals.

The Sewerage and Water Board must also be involved in any analysis of canals and drainage assets to ensure safety and system performance.

4\* Link existing water assets.

Who: CPC, S&WB, Office of Coastal and Environmental Affairs, NORA, Levee boards, etc.

When: Medium term

Resources: General fund, private foundations, federal grants

Connecting water assets to open space and each other through trails, bike lanes, pedestrian bridges, etc. not only improves accessibility but also fosters stewardship and creates new opportunities for economic investment in adjacent parcels. Furthermore these linkages can provide valuable forums for interpretive signage and educational events that enhance citizens understanding of water systems and their own role in water management. Crescent Park, Lafitte Greenway and Lakeshore Drive provide useful models that should be adapted to suit the water assets in East New Orleans and Algiers. Interconnectivity among these waterside corridors should be a long-range goal.

## Chapter 9: Enhancing Prosperity and Opportunity

**Summary** The current goal of “nurturing potential new industries that capitalize on New Orleans’ competitive strengths” should be amended to recognize urban water management as an area of specialization and growth in tandem with coastal restoration. Similarly, the goal/strategy text for “sustainable building” should be expanded to encompass water management and green infrastructure. The plan should acknowledge the role of community colleges and workforce training programs in bridging the gap between conventional construction and landscaping skills and green infrastructure installation and maintenance in order to expand economic opportunities for working New Orleanians.

GOAL 5.A., P.9.34

**Support development of urban water management, green infrastructure, and coastal protection and restoration industries. Capitalize on New Orleans river delta location to attract firms involved in water management and coastal restoration and to help local firms establish marketable expertise in these fields.**

### RECOMMENDED ACTIONS

1. Attract firms involved in coastal protection and restoration and urban water management.

Who: PPP, GNO Inc., Louisiana Economic Development, The Data Center, Propeller

When: First five years

Resources: Staff time

> Market New Orleans aggressively to firms involved in coastal protection and restoration and to management and engineering units that are particularly well-suited for city locations.

> Promote New Orleans as a location for professional and technical workers (e.g., science, engineering, architecture, planning) needed by the industry.

> Expand the research capacity of local research institutions and promote university/industry partnerships.

> Support locally-based energy service companies to expand into this market.

2. Prepare higher education and workforce training programs to fill jobs in these industries at all levels.

Who: Colleges and universities, Job 1, S&WB, professional associations and nonprofits

When: First five years

Resources: Federal, state and local funding

> Assess the market demand for degree and certification programs in the field of green infrastructure and coastal restoration to inform course offerings

GOAL 5.C, P.9.35

**Support development of a sustainable building design and construction industry. Capitalize on the potential for significant new business development and job creation in the alternative energy, energy and water efficiency, and stormwater management fields.**

#### RECOMMENDED ACTIONS

1. Capitalize on the potential for significant new business development and job creation in the alternative energy field.

Who: PPP; GNO, Inc.

When: First five years

Resources: Staff time

> Update zoning laws to provide for the range of uses and facilities necessary to support these technologies/industries.

> Market New Orleans as a laboratory for green energy and green infrastructure innovation.

> Provide incentives for location of research and production facilities in hydrokinetic, solar and wind energy. Work with Louisiana Economic Development and GNO Inc. to provide location incentives and site location assistance for targeted green industries to locate facilities in New Orleans.

> Promote the expansion of relevant university research capacity. Support increased funding for local university research and education in green science and technology fields with economic potential for the New Orleans region.

> Promote water reuse and water efficiency as preferred alternatives to groundwater withdrawal by conventional energy facilities

2. Train workers for new green energy and green infrastructure jobs.

Who: Workforce Development; Job 1

When: First five years

Resources: Staff time

> Develop green industry workforce training programs in partnership with area community colleges. Include nationally recognized certification programs for green infrastructure and coastal restoration when possible. Ensure workforce development in these fields encompasses design, installation and maintenance.

## Chapter 10: Community Facilities

**Summary** The current goal that “water, sewer, and drainage infrastructure [be] repaired, upgraded, safe, and resilient” should be amended to reflect the city’s commitments to a combined gray-green system that uses landscape features for water retention and infiltration alongside traditional pipes and pumps. These commitments are found in the Sewerage and Water Board’s MS4 (municipal separate storm sewer system) agreement with EPA, the *Resilient New Orleans* strategy and elsewhere. Reliable funding streams for capital projects and operations and maintenance are necessary to achieve city goals and warrant further attention in this section.

GOAL 1.A, P.10.15-16

**Rebuild the city’s water, sewer and drainage system to add resiliency, improve efficiency, and preserve public health**

## RECOMMENDED ACTIONS

...

4. Pursue innovative, where feasible, non-structural solutions for treating effluent, such as wetlands restoration, and for managing stormwater, such as natural drainage, thereby reducing the need for more expensive structural approaches.

Who: S&WB, DPW, City Planning Commission

When: First five years

Resources: Stafftime; grant funding; federal funds; capital budget

- > Modify regulations as needed to promote and implement strategies that encourage infiltration of stormwater such as pervious surfaces, directing rooftop runoff to rain gardens, swales, and richly vegetated public spaces, where feasible. Explore the implementation of alternative compliance payments and offsets as a means of achieving off-site runoff reductions for developments with limited or no options for using green infrastructure to comply.
- > Build upon requirements for new development with programs to retrofit existing development. Provide property owners with incentives such as rebate programs and tools such as revolving loan funds and technical assistance.
- > Establish a city-wide groundwater monitoring network to inform the city's efforts to decelerate subsidence through the use of green infrastructure and adaptive management of conventional drainage infrastructure. Make the resulting data available to the public.
- > Aggregate available data and conduct additional soil sampling to produce a city-wide soils survey that will inform the siting and design of green infrastructure. Make the resulting data available to the public.

**1.B\* Prioritize for capital spending those projects that advance the *Greater New Orleans Urban Water Plan* principles and/or reflect stormwater best management practices.**

## RECOMMENDED ACTIONS

1. Establish an overarching, interdepartmental governance structure to coordinate capital investment and program decision-making among those local governmental entities whose jurisdiction includes drainage or land assets necessary for integrated stormwater management as described in the *Greater New Orleans Urban Water Plan*.

Who: S&WB, DPW, Parks and Parkways, NORA, Audubon Commission, City Park., etc.

When: Medium term

Resources: General fund, private foundations, federal grants

2. Develop a sustainable, comprehensive and locally-derived funding stream for all city surface and subsurface drainage assets regardless of agency jurisdiction. Ensure adequate resources are allocated for operations and maintenance.

Who: S&WB, DPW, Parks and Parkways, NORA, Audubon Commission, City Park, etc.

When: Medium term

Resources: General fund, drainage fee, private foundations, federal grants, etc.

3. Enact a parcel based drainage service fee calculated on the basis of runoff volume. Such a fee should include rebates for investments in onsite retention, green infrastructure, pavement removal, etc. The funding derived from this fee should service drainage related assets in the city.

Who: S&WB, DPW, etc.

When: Medium term

Resources: Operating funds, etc.

- > The process of establishing such a fee should include robust public outreach and public input. When designing the fee structure, consideration should be given to related priorities such as affordable housing. An analysis of comparable programs, often called stormwater utilities, can help inform the creation of an effective, equitable

program for New Orleans. (According to a survey by Western Kentucky University, there are approximately 1600 stormwater utilities in North America: <https://www.wku.edu/engineering/civil/fpm/swusurvey/swus2016.pdf>).

GOAL 3 P.10.22

**3.D.\* Require retrofitting of public buildings, especially critical facilities, to comply with the city’s floodplain ordinance and additional freeboard.**

RECOMMENDED ACTIONS

1. Through ordinance and/or executive order commit to constructing new public buildings with additional freeboard and retrofitting existing critical facilities for compliance with current floodplain management standards.

Who: City Council, Mayor’s Office, CAO

When: Medium term

Resources: Staff time

## Chapter 12: Resilience

**Summary** At present, the implementation strategy in Volume 2, Chapter 12 does not reflect the understanding of resilience found in the city’s *Resilient New Orleans* strategy, which includes more than 40 actions in three broad areas: environment, city services, and social and economic equity. Given the cross-cutting nature of that strategy, Chapter 12 should be expanded to reflect the city’s intervening resilience aims. Similarly, the section calling for creation of a Stormwater Management Plan ought to be revised to reflect the *Greater New Orleans Urban Water Plan* and related work completed in recent years. Each of the recommended actions under goal 1D should include funding from capital projects and any future drainage fee; the present suggestion that the city rely on federal grants, which may or may not be forthcoming, belittles the importance of citywide stormwater management. In addition, language regarding storm risk should be carefully chosen to reflect a “multiple lines of defense” strategy and so as not to stigmatize evacuation, which can be a life-saving necessity.

GOAL 1A, P. 12.8

**Create an effective community process and collaboration with the Army Corps of Engineers, regional stakeholders, and the state to have a dialogue about storm probabilities, risk, protection levels, and hazard mitigation options in order to reach a community consensus on resilience standards.**

RECOMMEND ACTIONS

1. In conjunction with the Corps of Engineers and the Coastal Protection and Restoration Authority (CPRA), devise appropriate standards for public building, neighborhood, and infrastructure resilience.

...  
> Ensure that there is adequate education and ongoing outreach to the public about residual risk levels from hurricanes and other hazards. In addition to the risk of inundation due to failure in the flood protection system, the risks posed by localized flooding, loss of electricity, disruptions in transportation and food distribution networks, etc. warrant evacuation during severe storms and other precautions.

...

GOAL 1.D, P.12.13

**Implement the Greater New Orleans Urban Water Plan through the required application of technical expertise and best management practices to achieve minimum requirements for the retention of stormwater runoff on all new development and capital improvements (as expressed in CZO Article 23) and through complementary policies to drive similar retrofits on already developed parcels.**

## RECOMMENDED ACTIONS

1. Convene a working group of city agencies whose jurisdiction includes drainage or land assets necessary for integrated stormwater management to coordinate capital investment and program decision-making related to green infrastructure.

Who: CPC; DPW; SW&B; Parks and Parkways; DS&P; Office of Coastal and Environmental Affairs, NORA, Audubon Commission and City Park

When: First five years

Resources: Federal grants (FEMA; EPA); bond funds, operating funds

2. Establish mitigation and storm water management best practices in design and construction of public facilities, including freeboard, the use of pervious material for pathways, parking lots and parking lanes; building elements such as green roofs, blue roofs and cisterns; and landscape elements such as bioswales and rain gardens.

Who: CAO's office; Project Delivery Unit; working group cited above

When: First five years

Resources: Recovery funds; capital funds

Innovative storm water management techniques that rely on natural drainage can reduce the costs of hard infrastructure and mitigate flooding from rain events. Because the street network has so large a physical footprint, the city should adopt a de facto policy for the use of permeable surfaces on parking lanes, sidewalks, etc. and accompanying green infrastructure streetscape elements such as bioswales and tree cells.

...

5. Replace most lawn areas in neutral grounds and street sides with bioswales, plantings and appropriate green infrastructure, when necessary amending the soil to accommodate increased rainwater detention.

Who: Parks and Parkways, DPW

When: Medium term

Resources: EPA storm water management grants, FEMA HMGP funds, Capital Budget

Storm water engineering increasingly is adapting the lessons of natural systems to controlling and filtering runoff . These techniques can be applied at any scale, from backyard rain gardens to streets and city parks. Rain gardens are small areas that are lower in elevation than their surroundings and are filled with plantings. They capture storm water from roofs and other drains and allow the water to seep into the ground. Lawns are only marginally superior to paved areas in retaining storm water, particularly when soils are compacted, so less lawn and more ground cover, shrubs and trees in the neutral grounds will help the city manage water, mitigate flooding, and reduce subsidence. This planting strategy can coexist with the use of neutral grounds for walking and bike paths. On the neighborhood streets augmenting curbs or catch basins with landscaped bioswales will improve storm water management by enhancing absorption of water and reducing the velocity of storm water. It is important to recognize that these features may require re-grading of streets and removal or alteration of curbs so that runoff is directed into green infrastructure installations, reaching storm drains only after the installations fill. Furthermore, it is important to plan and budget for the specialized maintenance of green infrastructure installations.

>Develop a comprehensive design and investment plan for the Departments of Public Works and Parks & Parkways. This plan should detail stormwater best management practices for neutral grounds, intersections, rights of way, etc. as well as long-term maintenance protocols for the prescribed green infrastructure installations. The plan should include specific project commitments and establish new default designs for road or utility projects that disrupt neutral grounds. It should be completed within two years of amending the Master Plan accordingly. (See Chapter 7.)

6. Examine all options and implement a comprehensive strategy for managing groundwater levels and reducing subsidence.

Who: S&WB, DPW, Office of Coastal and Environmental affairs

When: Medium term

Resources: Federal grants, Operating funds, Capital Budget

The desiccation of New Orleans' soils over time is a principal reason why the city has experienced such a severe rate of subsidence. Dutch engineers and landscape architects who visited New Orleans and have suggested that the Mississippi River could potentially be used to maintain groundwater levels. The widespread installation of green infrastructure for rainwater infiltration would slow the rate of soil compaction and related subsidence in parts of New Orleans, particularly those most vulnerable neighborhoods closer to the lakefront. Finally, eliminating or reducing groundwater withdrawal for industrial uses in New Orleans East would have significant positive impacts on the present high rate of subsidence there.

- > Establish a city-wide groundwater monitoring network to inform the city's efforts to decelerate subsidence through the use of green infrastructure and adaptive management of conventional drainage infrastructure. Make the resulting data available to the public.
- > Aggregate available data and conduct additional soil sampling to produce a city-wide soils survey that will inform the siting and design of green infrastructure. Make the resulting data available to the public.
- > Support regional or state efforts to map geologic faults and other subsidence factors in Southeast Louisiana.
- > Create a GIS layer or layers for these and other subsurface attributes for use in future city planning initiatives.
- > Adopt new standards for catch basins and drain inlets in which the bottoms have openings for exfiltration. Retrofit existing basins by drilling a series of holes in the bottoms. This would create a city-wide, distributed groundwater recharge system. When water stands in catch basins, it would create the opportunity for stormwater to infiltrate back into the soil.

7. Incorporate natural drainage systems, create rain gardens and small scale water management infrastructure to reduce runoff and increase the permeability of the urban landscape, including public and private lands.

Who: S&WB; DPW; Parks and Parkways, CPC

When: First five years

Resources: Federal Grant, operating funds

- > Explore the implementation of alternative compliance payments and offsets as a means of achieving off-site runoff reductions when redevelopment projects lack landscape area.
- > Build upon requirements for new development with programs to retrofit existing development. Provide property owners with incentives such as rebate programs and tools such as revolving loan funds and technical assistance.

...  
Develop a pilot project retrofitting one of the city's drainage canals into a landscape amenity accessible to adjacent neighborhoods.

Who: Levee District, S&WB, NORA, Mayor's Office

When: First five years

Resources: Levee District revenues; Capital Budget

Much of the city's drainage infrastructure is currently hidden from view. Water is whisked away into storm drains which feed sub-surface drainage canals and ultimately tie into drainage out fall canals that are hidden from view. Instead of hiding drainage infrastructure behind mammoth concrete walls, or within underground culverts, the city

could “daylight” more of its drainage infrastructure, thereby creating a new component of the city’s aesthetic identity. This concept is described in the *Greater New Orleans Urban Water Plan*.

This complex concept may best be approached with a pilot project. Engineering factors and social factors should both be considered in selecting the appropriate canal segment. Public input will be a vital element. A successful pilot project will showcase the aesthetic improvements associated with accessible, landscaped canals; demonstrate the feasibility of managing canal water levels so as to avoid dewatering surrounding soils; and provide quantifiable evidence of investment in affected canal corridor. Finally, such a pilot project can be used to achieve improved linkage to and between water assets as described in chapter 7.

GOAL 2.A. P.12.17

**A RESILIENT CITY CAPABLE OF WITHSTANDING STORMS THROUGH MULTIPLE LINES OF DEFENSE.**

...

GOAL 2.B. P.12.17

**Adapt building regulations and techniques to more accurately respond to risks from wind and flooding, including the risk of levee overtopping.**

RECOMMENDED ACTIONS

1. Design new public facilities and retrofit existing public facilities to make them resilient to wind and flooding and consider additional freeboard requirements. ...

GOAL 2.C. P.12.18

**Ensure that sufficiently robust regulatory measures are in place to make new development and construction resilient to flooding ...**

2. Supplement DFRIM requirements, where appropriate, with local “freeboard” elevation requirements to mandate greater building elevations and incentivize freeboard when not required by statute.

Who: Hazard Mitigation Unit

When: First five years

Resources: FEMA grants

The City has been working with FEMA on the Digital Flood Insurance Rate Map (DFIRM) process and recent adoption of a new floodplain ordinance opens the door for next steps:

>Implementing local freeboard elevation requirements for new construction and major renovations.

>Developing policies to incentivize freeboard when not required by statute. These include leading by example on civic buildings, establishing best practices for historic districts and providing elevation and floodproofing financing options to residents facing substantial flood insurance rate hikes.

3\* Continue pursuing policy changes that make the city’s floodplain ordinance more protective of life and property.

Who: City Council, Hazard Mitigation Office, CPC, HDLC, FEMA, etc.

When: First five years

Resources: Operating funds, etc.

Evaluate and advance such policies as:

> Requiring a review to identify appropriate methods to protect historic properties from flood risk prior to granting an exemption from required elevations. These methods might include floodproofing or interior elevation. The current language provides an automatic exemption.

- > Removing the variance for “new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level.”
- > Requiring elevation and/or floodproofing for critical and public facilities in a manner that satisfies FEMA’s Community Rating System (CRS).
- > Institute a cumulative substantial damage/improvement requirement, wherein any repairs or changes made over a 10-year period cannot equal or exceed 50% of the market value of the structure. This is an important mitigation measure, as a series of small floods over a 10-year period could result in the mitigation of many buildings in the parish. Right now, the Orleans ordinance only defines substantial damage/improvement as equaling or exceeding 50% of the market value, without a time requirement.

GOAL 2.D P.12.19

**Secure additional funding to assist property owners and small businesses with the cost of elevating and storm proofing structures.**

## Chapter 13: Environmental Quality

**Summary** This chapter calls for establishment of a “Climate Change Policy Advisory Group” and development of a “citywide Climate Action Plan.” It should be clarified what has and has not been accomplished in this regard via the 100 Resilient Cities initiative and other avenues. The revised plan should assign to the advisory group specific, measureable action-oriented tasks to be performed. Similarly, the recommended actions related to green building remain viable tactics. More specific deadlines, accountability measures, and outcomes should be established to better assure implementation. Language regarding efforts to make New Orleans a leader in sustainable building and sustainable lifestyles should be amended to reflect the importance of water management. Additional language is needed regarding water quality is warranted, as present goals related to toxic pollution do not address nutrient pollution, litter, etc.

GOAL 4.A. P.13.21

**Ensure that homes, commercial buildings, and public facilities are “weatherized,” energy-efficient and water-efficient. ...**

4.\* Recognize the contribution of water treatment and pumped drainage to the city’s energy use and carbon footprint.

Who: CAO, Sewerage and Water Board, Office of Coastal and Environmental Affairs, NORA, etc.

When: First five years

Resources: General fund, private foundations, federal grants

Build upon efforts underway at the Sewerage and Water Board to quantify energy savings from (1) water conservation, including efforts to alleviate leaks in the drinking water supply system and (2) on-site stormwater management that alleviates reliance on pumped drainage. Incorporate this information into green building benchmarks and climate mitigation strategies.

GOAL 11, P. 13.35-36

**SOIL, WATER AND AIR FREE FROM POLLUTION AND TOXIC CONTAMINATION**

...

**11.C\* Improve and protect water quality in waterways, wetlands and lakes**

RECOMMENDED ACTIONS

1.\* Keep litter, pet waste, excess nutrients and sediment out of the city’s drainage network

Who: Sewerage and Water Board, Office of Coastal and Environmental Affairs, USACE, etc.

When: Long term

Resources: General fund, private foundations, state and federal grants

Litter, pet waste and sediment entering storm drains has adverse effects. Blockages can result in localized flooding, and when litter does enter canals it must be removed by special screens or be released into natural water bodies. When these pollutants reach the wetlands and estuaries bordering the city (including Lake Pontchartrain) they have adverse effects on fish and other wildlife. Protecting water quality complements, the city's goals of promoting water-based recreation opportunities and water-based urban design.

New Orleans operates under a Municipal Separate Storm Sewer System (MS4) permit issued by Louisiana DEQ subject to EPA standards. Minimizing pollution, including bacterial pollution, excess nutrients and litter is a fundamental goal of this permitting program. Construction activities in New Orleans are subject to standards set by the National Pollutant Discharge Elimination System. These require the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) at construction sites to keep sediment, paint, and other forms of waste from entering waterways.

- > Deploy a range of tools available for MS4 compliance, including education, street sweeping, green infrastructure, etc., and priorities those offering co-benefits such as flood risk reduction.
- > Robustly enforce SWPPP requirements on construction sites and demonstrate best practices at all public and publicly funded construction projects.
- > Encourage the use of stormwater best practices that improve quarter quality, including green infrastructure such as bioretention, for compliance with CZO requirements.
- > Partner with nonprofits, schools and state agencies to conduct routine water quality testing and make the results publicly available

## Chapter 14: Land Use Plan

**Summary** It is essential that the land use plans and principles do not hinder but rather enable the advancement of the city's resilience aims. As such, as practicable, Chapter 14 content should incorporate by reference or otherwise embed land use and development practices that are articulated with more detail in the other chapters of Volume 2 of the Master Plan. The revised Master Plan should reconcile any inconsistencies between Chapter 14's Future Land Use Map with the proposed water management projects detailed in the *Greater New Orleans Urban Water Plan*. Similarly, the map should identify public rights of way and other public space in which water management practices and installations should be emphasized, making neutral grounds, canals and linear green spaces de facto stormwater management zones. All land use categories under Institutional, Natural Areas and Transportation should include explicit reference to on-site water management through green infrastructure for retention and infiltration as these opportunities are not limited to parks. Urban design principles should enable the incorporation of risk reduction practices (e.g. property elevations, water retention) within historic properties and districts. They should also allow blighted and/or vacant property not anticipated to be developed as structures, to be repurposed to serve as urban agriculture, community gardens, or water retention park space either through public or private investment and control. Opportunity sites (currently p. 36) should be selected on the basis of flood maps and elevation, avoiding high risk areas and those where flood insurance costs stifle opportunity. The plan should identify water retention and infiltration strategies for each identified opportunity site in order to illustrate how sustainability and flood control aims can be integrated into neighborhood design.

FUTURE LAND USE CATEGORIES, P. 14.16-17

INSTITUTIONAL

**Goal:** Preserve and enhance existing large-scale institutions such as health care, education (colleges and universities), detention centers and other facilities.

**Range of Uses:** Hospitals, colleges, universities, military and public detention facilities with large campus-like facilities. Smaller-scale, local houses of worship, public and private schools, police and fire stations, emergency and community centers are included in residential, commercial and mixed-use areas, as they are essential components of neighborhood life.

**Development Character:** Large-scale, coordinated campus development incorporating green infrastructure for on-site water management with appropriate transitions to surrounding uses and neighborhoods. ...

#### CEMETERY

**Goal:** Preserve and provide areas for cemeteries.

**Range of Uses:** Cemeteries.

**Development Character:** Cemeteries and accessory buildings as well as on-site water management to protect monuments from excess stormwater

#### TRANSPORTATION

**Goal:** Retain and enhance areas for transportation infrastructure and services.

**Range of Uses:** Airports (Lakefront Airport), train yards, ferry terminals and city-owned parking facilities, and supporting office and low-intensity storage/warehouse uses.

**Development Character:** Massing and bulk will vary depending on location, however landscaping and buffering standards are required, particularly where abutting residential neighborhoods, and should prescribe appropriate green infrastructure to minimize stormwater runoff.

#### URBAN DESIGN FRAMEWORK, P. 14.24-25

##### **Promote sustainability:**

- **Work with nature to enhance resilience.** No U.S. city is as conscious of the need to adapt to a changing environment as New Orleans. It can lead all American cities in exploring approaches to wetlands restoration, elevating and hardening buildings, managing storm water to slow subsidence, integrating gray and green infrastructure across landscape, and other ways of working with nature to protect the city from rising seas and more frequent storms.
- **Reduce the city's carbon footprint.** National policy is clearly heading in a direction to support funding of projects that further reduce carbon emissions. New Orleans' per capita carbon footprint already ranks well nationally (#29 lowest metro area) due in part to its compact form, strong preservation values, and walkable neighborhoods. Expanding transit use, attracting more residents to reduce sprawl, adopting green techniques in construction of and operation of new buildings, reducing the leakage of treated water and overreliance on pumped drainage and similar measures, will further position New Orleans as one of America's greenest cities.
- **Celebrate the city's relationship to water.** A new generation of landscaped canals, rain gardens, restored wetlands, and similar steps can add a 21st-century urban design signature that enriches life in New Orleans while protecting the city from rain-driven flooding. These elements can be distributed across the cityscape at various scales and linked by green-blue corridors that improve public understanding of water systems water, promote active lifestyles and spur adjacent private-sector economic investment.

**The public realm of streets, sidewalks, plazas, parks, and other public spaces:**

- Reclaim the river, lake and other waterfronts for lively public spaces, providing safe access to water assets in all areas of the city.
- Reclaim hidden water assets to beautify the cities street grid and reduce street flooding by installing green infrastructure for water retention and infiltration in neutral grounds and along sidewalks and by daylighting canals where appropriate.
- Re-knit the urban fabric by reducing barriers...

**Downtown**

- In downtown, encourage building design with ground floor designs that are welcoming to pedestrians while complying with freeboard requirements and avoid blank and fortress-like ground floors.
- Limit extensive office uses on ground floors in favor of more lively uses, if feasible.
- Use trees, canopies, colonnades or galleries for shade along pedestrian streets as well as green infrastructure and permeable pavers/pavement for stormwater management.
- Establish gradual transitions between small-scale and larger-scale buildings.

**Neighborhood infill**

- Respect the scale and massing of buildings in historic areas while recognizing the city's history of building elevation and the risk flooding poses to historic fabric...
- Where vacant lots are not slated for development in the near term, enable them to serve as urban agriculture sites, community gardens, or water retention lots through public or private entities.
- Design building facades to provide visual interest ...

**Promote sustainability**

- Clad areas below floor level on buildings that are raised for flood protection purposes to provide a consistent street wall, using flood vents when needed.
- Incorporate building elements that improve energy efficiency and stormwater management, such as green roofs, rain gardens, solar panels, wind turbines, and others wherever possible. These elements should be scaled appropriately and incorporated seamlessly into the overall façade ...

## Chapter 15: Neighborhood Participation Program

**Summary** The existing Neighborhood Participation Program (NPP) should be amended to include separate procedures for public projects governing when the need for an NPP meeting is triggered and who from the community should be included. At present, a single standard applies for both public or private projects. In both cases, the project must either entail zoning changes, conditional uses, and/or variances to trigger an NPP meeting. Further, only property owners, residents and neighborhood associations or the equivalent local groups, businesses and neighbors within 300 or 600 feet of the proposed project or subject property or project depending on the project's size are required to be contacted. While these requirements may be suitable for private projects, an NPP meeting for public investments should be

triggered for a broader range of circumstances and require outreach to a broader array of impacted citizens and private entities.

GOAL 4.B, P. 15.20

Insure that significant publicly funded projects or those on public lands are included in the NPP, stakeholder input sought from the entirety of the affected neighborhood or district ...

## Chapter 16: Implementation

**Summary** This Chapter should include detailed procedures that detail how local governmental entities and developers of qualifying private projects (based on size, risk, and/or other sensitivity thresholds) should demonstrate that one or more implementation goals and/or recommended actions from Volume 2 are advanced by the proposed project or program. As feasible, incentives for private projects should be commensurate with the degree to which the project advances specific action items from Volume 2 *above and beyond* Chapter 14 requirements. Additionally, as practicable, such recommended procedures should be incorporated into Chapter 14 and other codified so as to be enforceable through Executive Order or Ordinance.

NARRATIVE, P.16.8

### 2. FINANCIAL AND FISCAL FRAMEWORK

...

- User fees and betterment fees for certain services or improvements can help fund them and also promote desired actions. For example, many communities charge fees for removing more than one bag of trash a week as a way to fund services and to reduce solid waste. Approximately 1600 U.S. jurisdictions have created stormwater utilities as a means of shifting a portion of drainage and sewerage costs to a user pays model.

...

GOAL 3.A.3, P.16.12

### **Make the Master Plan a living document**

... RECOMMENDED ACTIONS...

### 3. Review progress on the Plan at least annually at the City Planning Commission and City Council

Who: City Council; CPC

When: First five years

Resources: Staff time

Whether or not there are any amendments being proposed, a public review of how the City is using the Plan, the way Plan objectives have shaped decision-making, successes and obstacles to implementation, and new circumstances that may affect the Plan's goals and principles will keep the Plan current as officials and the public are reminded of its contents. This could be achieved by presentation and discussion on a particular Master Plan chapter each month.

GOAL 4.A.1, P.16.14

### **Ensure capital improvement processes are linked to the Master Plan**

... RECOMMENDED ACTIONS...

1. Create a system to certify that capital improvement projects and any other public projects are in compliance with the Master Plan

Who: CPC  
When: First five years  
Resources: Staff time

... As part of the CIP process, departments proposing capital projects must prepare a narrative explanation of how the project furthers or does not interfere with the goals, policies, and strategies of the Master Plan, and make available to the CPC any departmental master plans or other relevant documents, so that the CPC can evaluate how their plans fit into the city's overall master plan framework. Give the citywide importance of resilience goals, the practice of certifying whether or not capital projects will improve drainage should be amended or augmented to verify whether or not projects incorporate best practices for stormwater management. A subsidence vulnerability statement is also desirable but may require additional data gathering and development of procedures.

GOAL 4.A.3, P.16.14

**Create a system to certify private projects for compliance with the Master Plan and city resilience goals.**

Who: CPC  
When: First five years  
Resources: Staff time

Although private projects will be subject to the zoning ordinance, it would also be valuable to have a system where by private projects that are seeking CPC approval of land use actions have to show how they are consistent with the Master Plan. This can be done by including a brief narrative on how the proposed project conforms to the Master Plan in terms of a variety of issues, including neighborhood character and housing policy, transportation, green space, energy efficiency, and so on, in applications for approvals. Because developers often pass flood risk (and responsibility for flood insurance) onto subsequent property owners, this narrative should specifically address resilience and stormwater management.

GOAL 5.A, P.16.16

**Plan for maintenance, repair and replacement of assets**

...RECOMMENDED ACTIONS...

2\* Create an interagency maintenance plan for stormwater management and green infrastructure assets

Who: CAO, S&WB, Parks and Parkways, NORA, City Park, Audubon Commission, etc.  
When: First five years  
Resources: General fund, federal grants

Because best practices for stormwater management in a subsidence prone city like New Orleans dictate the use of landscape elements to retain water and allow for infiltration, it is important that these installations receive adequate maintenance. The city now requires private developers to demonstrate a financial commitment to operations and maintenance. The city can streamline and improve maintenance of green infrastructure installations on public land through coordinated standards, scheduling, training, contracting, etc. across departments. This entails:

- >A centralized inventory of green infrastructure installations and comprehensive maintenance schedule
- >Determining the agency or agencies best suited to house green infrastructure maintenance technicians
- >Identifying a protocol for interagency cost-sharing if applicable

- >Assessing the potential for meeting operations and maintenance by contracting with the private sector
- >Identifying a certification credential and/or skills combination desired and sharing this information with area community colleges and workforce development agencies

## Volume 3 -- Current Conditions

### Chapter 12: Resilience

**Summary** This section should be updated to reflect the creation and content of the *Resilient New Orleans* strategy as well the latest iteration of the city's Hazard Mitigation Plan. Furthermore, several issues referenced as goals in Volume 2 have been resolved or advanced, including FEMA DFIRM maps, a new city floodplain ordinance, new stormwater management standards in the city's CZO, and design decisions related to lakefront pumping stations. These progressions can be detailed here. This section should include language regarding what individuals and business owners can do as a part of creating Multiple Lines of Defense. This section can also reference the City Planning Commission's Main Street Resilience Plan.

### Chapter 10: Community Facilities:

**Summary** The current conditions of New Orleans infrastructure are different today than they were five years ago, and investments made during the intervening years should be reflected here. Furthermore, policy developments pertaining to infrastructure should be recognized, including the Sewerage and Water Board's consent decree with EPA and the city's agreement with FEMA regarding \$1.8 billion in street and subsurface repairs. The present lack of any reference to subsidence is an oversight that should be remedied, as subsidence has significant impacts on streets and other facilities. This can be addressed in the context of the city's commitment to integrated water management as described in the *Greater New Orleans Urban Water Plan*.

### Chapter 14: Land Use Plan

**Summary** This section can be improved with the addition of information discussing how to balance the historic character of the city with the need to protect structures. There is a lack of awareness of the many ways in which flood protection and historic character do not have to be at odds. For example, some discussion of appropriate elevation techniques and of the history of elevation in the city. This section could reference the hardening guide developed as part of the City Planning Commission's *Main Street Resilience Plan* and FEMA's *History of Building Elevation in New Orleans* publication.

### Appendices:

**Summary** We recommend the inclusion as appendices:

- o Greater New Orleans Urban Water Plan
- o State and City Hazard Mitigation Plan
- o State Coastal Master Plan
- o Resilience Strategy
- o Main Street Resilience Plan