



# **SECTION 7**

## Integrated Planning Schedule

# Section 7 Integrated Planning Schedule

## 7.1 Water, Wastewater & Stormwater Integrated Recommendations

As part of the Water, Wastewater, and Stormwater Integrated Master Plan, B&W developed the City’s overall project priority list based on the 10-Year and 20-Year CIP projects outlined in **Section 6**. The following criteria were taken into consideration in the priority ranking:

- The existing can-type lift station rehabilitation projects (Lift Stations No. 1, 2 and 4) were given the highest priority as these lift stations are reaching the end of their useful life.
- Projects necessary to sustain the City’s 2025 re-development improvements were given a higher priority. The projects shown with a star (\*) represent the re-development projects. These projects were prioritized to be completed by Year 5 in the priority schedule to align with the City’s 2025 re-development improvements. The City may adjust these project priorities accordingly based on any fluctuations in the re-development timeline.
- The City provided a Funds Availability Chart for Water and Sewer by Year with total estimated funds over a 10-year period totaling \$21,600,000.00 (in 2019 dollars) (see **Table 7-1**). The project fund balance is for water and sewer projects only. Monies collected from the current Stormwater Utility Rates are only sufficient for operations & maintenance efforts. The City’s Funds Availability Chart for Water and Sewer by Year assumes payments due to the City of Fort Lauderdale under current service contracts increase as follows:
  - 3.6% increase in water rates over the next 4 years
  - 7% increase in sewer rates over the next 4 years

Additionally, the City’s Funds Availability Chart for Water and Sewer by Year assumes no increase in revenues for re-development projects and assumes minor impact fee revenues. These estimated budgetary numbers were considered when determining the Total CIP expenditures per year.

**Table 7-1: Summary of Estimated Available Funds for Utility Projects**  
(Provided by City in 2019 dollars)

Description	Amount
Estimated ending fund balance FY 18/19	\$21,800,000
FY 19/20 budgeted change in fund balance	(\$300,000)
Estimated ending fund balance FY 19/20	\$21,500,000
Less: Restricted fund balance	\$16,700,000
Minimum fund balance, approximately 30% of annual expenditures	\$2,500,000
Fund balance available	\$2,300,000
Projected change in fund balance	

**Table 7-1: Summary of Estimated Available Funds for Utility Projects**  
*(Provided by City in 2019 dollars) (cont'd)*

Description	Amount
FY 20/21	\$1,300,000
FY 21/22	\$1,400,000
FY 22/23	\$1,500,000
FY 23/24	\$1,800,000
FY 24/25	\$1,800,000
FY 25/26	\$1,900,000
FY 26/27	\$2,100,000
FY 27/28	\$2,300,000
FY 28/29	\$2,500,000
FY 29/30	\$2,700,000
<b>Total estimated available funds over ten year period</b>	<b>\$21,600,000</b>

- Sanitary sewer lining improvements were given a higher priority over the proposed lift station improvements as an effort to first reduce I/I issues.
- Water main improvements were given a higher priority.

**Table 7-2** depicts the 10-year and 20-year integrated project priority listing based on the above criteria.

**Table 7-3** outlines the proposed stormwater improvements from Years 20 – 30. These improvements include the Long-Term projects based on SLR projection that extends beyond the 20 years as shown in **Section 6**.

The proposed improvements for each project are described in detail in **Section 6**. The conceptual construction cost estimate includes the cost for detailed design and construction engineering and inspection for the project. The construction cost information is preliminary in nature. These costs are based upon comparisons of previous and current similar types of work and materials underway in the Southeast Florida area. All costs developed herein are in 2019 dollars and do not include land acquisitions or easements.

The Integrating Planning Schedules shown in **Table 7-2** and **Table 7-3** are suggested priority schedules to be used by the City for planning purposes. The City may adjust the project schedule and priority based on current funding and maintenance needs and priorities. The City issued a Request for Proposal on January 14, 2020 for a Rate Study for Water, Sewer, and Stormwater. The results of the pending rates study may adjust the proposed planning schedule presented in this Master Plan report. The City may adjust the proposed planning schedules as needed based on the rate study results.

Table 7-2: Integrated Project Priority Listing (10-Year & 20-Year CIP)

Project Number	Project Name	Total Cost	Budget Cost per Year																				
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	
<b>Potable Water Projects</b>																							
PW-1	Dixie Highway 10-inch Water Main Improvements	\$ 1,644,603.75	\$ 822,302																				
PW-2	NW 30th Court & West Oakland Park Boulevard Water Main Replacement	\$ 2,567,598.75		\$ 1,283,799		\$ 1,283,799																	
PW-3	Wilton Manors West Phase I Water Main Replacement	\$ 1,727,250.00			\$ 863,649																		
PW-4	NW 29th Street Water Main Replacement	\$ 1,458,310.50						\$ 1,458,311															
PW-5	NW 9th Avenue & NW 26th Street Water Main Replacement	\$ 289,912.50						\$ 289,913															
PW-6	Wilton Manors East Phase I Water Main Replacement	\$ 3,645,438.75							\$ 3,645,439														
PW-7	Wilton Manors Grove & NE 21st Street Water Main Replacement	\$ 1,186,715.45							\$ 1,186,713														
PW-8	Wilton Manors South Water Main Replacement	\$ 2,382,952.50								\$ 2,382,953													
PW-9	NE 28th Street Water Main Replacement	\$ 1,739,508.75									\$ 1,739,509												
PW-10	NE 21st Court Water Main Replacement	\$ 430,751.25									\$ 430,751												
PW-11	Andrews Avenue 8-inch Water Main Replacement	\$ 1,588,545.00										\$ 1,588,545											
PW-12	NW 9th Avenue 6-inch Water Main Replacement	\$ 1,202,175.00											\$ 1,202,175										
PW-13	Wilton Manors West Phase II Water Main Replacement	\$ 984,521.25												\$ 984,521									
PW-14	NW 26th Street and NW 8th Avenue Water Main Replacement	\$ 1,492,250.00													\$ 1,492,250								
PW-15	NE 24th, 25th, and 26th Street Water Main Replacement	\$ 1,623,510.00														\$ 1,623,510							
PW-16	Wilton Manors East Phase II Water Main Replacement	\$ 3,732,716.25															\$ 1,866,358	\$ 1,866,358		\$ 1,921,404	\$ 1,921,404		
PW-17	Wilton Manors East Phase III Water Main Replacement	\$ 3,842,808.75																					
<b>Potable Water Projects Subtotal:</b>		<b>\$ 31,539,654</b>	<b>\$ 822,302</b>	<b>\$ 1,283,799</b>	<b>\$ 2,147,448</b>	<b>\$ 863,649</b>	<b>\$ 1,748,223</b>	<b>\$ 3,645,439</b>	<b>\$ 1,186,713</b>	<b>\$ 2,382,953</b>	<b>\$ 1,739,509</b>	<b>\$ 430,751</b>	<b>\$ 1,588,545</b>	<b>\$ 1,202,175</b>	<b>\$ 984,521</b>	<b>\$ 1,492,250</b>	<b>\$ 1,623,510</b>	<b>\$ -</b>					
<b>Wastewater Projects</b>																							
WW-1	Lift Station No. 11 Pump Impeller Upgrade*	\$ 22,477.50		\$ 22,478																			
WW-2	Lift Station No. 1 Replacement and Force Main Replacement	\$ 671,005.82		\$ 671,006																			
WW-3	Lift Station No. 4 Service Basin Lining	\$ 199,390.41		\$ 199,390																			
WW-4	Lift Station No. 4 Replacement	\$ 593,735.67		\$ 593,736																			
WW-5	Lift Station No. 2 Replacement	\$ 612,908.98		\$ 612,909																			
WW-6	Lift Station No. 5 Service Basin Lining*	\$ 1,571,529.40		\$ 1,571,529																			
WW-7	Lift Station No. 5 Electrical, Pumps, and Force Main Replacement*	\$ 566,845.09		\$ 566,845																			
WW-8	Gravity Main Trunkline Replacement*	\$ 5,502,991.50		\$ 2,751,496	\$ 2,751,496																		
WW-9	Lift Station No. 3 Service Basin Lining*	\$ 1,256,724.52			\$ 1,256,725																		
WW-10	Lift Station No. 3 Replacement and Force Main Replacement*	\$ 1,540,440.00			\$ 1,540,440																		
WW-11	Lift Station No. 7 Service Basin Lining*	\$ 409,862.23			\$ 409,862																		
WW-12	Lift Station No. 7 Replacement and Force Main Replacement*	\$ 659,002.84				\$ 659,003																	
WW-13	Lift Station No. 6 Pump and Force Main Replacement*	\$ 514,622.36				\$ 514,622																	
WW-14	Lift Station No. 8 Odor Control, Electrical, Pumps and Force Main Replacement*	\$ 342,956.80				\$ 342,957																	
WW-15	Lift Station No. 10 Service Basin Lining	\$ 1,273,275.45							\$ 1,273,275														
WW-16	Lift Station No. 10 Rehabilitation	\$ 225,374.40								\$ 225,374													
<b>Wastewater Projects Subtotal:</b>		<b>\$ 15,972,052</b>	<b>\$ 3,671,048</b>	<b>\$ 3,318,341</b>	<b>\$ 2,751,496</b>	<b>\$ 3,216,036</b>	<b>\$ 1,516,482</b>	<b>\$ -</b>	<b>\$ 1,273,275</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Stormwater Projects</b>																							
SW-1	Coral Gardens Drive Outfalls & Stormwater System Improvements	\$ 707,246.00	\$ 353,673	\$ 353,673																			
SW-2	NE 28th Drive Outfall Improvements	\$ 239,908.50			\$ 239,909																		
SW-3	NE 14th Avenue Outfall Improvements	\$ 121,891.50			\$ 121,892																		
SW-4	NW 24th Street to NW 22nd Street Stormwater System & Outfall Improvements	\$ 497,596.50			\$ 497,597																		
SW-5	NW 3rd Avenue Stormwater System & Outfall Improvements	\$ 698,766.75			\$ 698,767																		
SW-6	NE 30th Street Outfall Improvements	\$ 337,149.00						\$ 337,149															
SW-7	NE 28th Drive Outfall Improvements	\$ 108,040.50						\$ 108,041															
SW-8	NE 7th Terrace Stormwater System and Outfall	\$ 227,812.50							\$ 227,813														
SW-9	NE 17th Avenue Stormwater Outfall Improvements	\$ 91,010.25							\$ 91,010														
SW-10	NE 27th Drive Stormwater Exfiltration Trench	\$ 246,091.50							\$ 246,092														
SW-11	NW 25th Street Stormwater Exfiltration Trench	\$ 658,678.50							\$ 658,679														
SW-12	NE 25th Street & NE 8th Terrace Stormwater Exfiltration Trench	\$ 593,683.75								\$ 593,683													
SW-13	NE 16th Ave & NE 28th Dr Pump Station and Related Improvements	\$ 2,714,492.45									\$ 1,357,246	\$ 1,357,246											
SW-14	NE 18th Ave & Coral Gardens Dr Pump Station and Related Improvements	\$ 2,492,375.59										\$ 1,246,188	\$ 1,246,188										
SW-15	NE 14th Ave & NE 15th Ave Pump Station and Related Improvements	\$ 1,757,580.08											\$ 1,757,580										
SW-16	NW 6th Ave & NW 22nd St Pump Station and Related Improvements	\$ 8,007,675.42												\$ 2,669,225	\$ 2,669,225	\$ 2,669,225	\$ 2,669,225	\$ 2,669,225	\$ 2,669,225	\$ 2,015,502	\$ 2,015,502		
SW-17	W Ave & NW 20th St Pump Station and Related Improvements	\$ 4,031,003.50													\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SW-18	NE 24th St & NE 16th Ave Pump Station and Related Improvements	\$ 4,344,675.93																					
SW-19	NE 24th St & NE 20th Ave Pump Station and Related Improvements	\$ 7,177,649.97																					
SW-20	NE 27th Dr & Coral Gardens Dr Drainage Improvements	\$ 549,474.27																					
SW-21	NW 6th Ave & NW 29th St Pump Station and Related Improvements	\$ 2,921,374.91																					
<b>Stormwater Projects Subtotal:</b>		<b>\$ 38,524,276</b>	<b>\$ 353,673</b>	<b>\$ 353,673</b>	<b>\$ 361,800</b>	<b>\$ 497,597</b>	<b>\$ 698,767</b>	<b>\$ 445,190</b>	<b>\$ 318,823</b>	<b>\$ 246,092</b>	<b>\$ 658,679</b>	<b>\$ 593,683</b>	<b>\$ 1,357,246</b>	<b>\$ 1,357,246</b>	<b>\$ 1,246,188</b>	<b>\$ 1,246,188</b>	<b>\$ 1,757,580</b>	<b>\$ 2,669,225</b>	<b>\$ 2,669,225</b>	<b>\$ 2,669,225</b>	<b>\$ 2,669,225</b>	<b>\$ 2,015,502</b>	
<b>Total CIP Projects (Water &amp; Sewer):</b>		<b>\$ 47,511,706</b>	<b>\$ 4,493,350</b>	<b>\$ 4,602,140</b>	<b>\$ 4,898,944</b>	<b>\$ 4,079,685</b>	<b>\$ 3,264,705</b>	<b>\$ 3,645,439</b>	<b>\$ 2,459,989</b>	<b>\$ 2,382,953</b>	<b>\$ 1,739,509</b>	<b>\$ 430,751</b>	<b>\$ 1,588,545</b>	<b>\$ 1,202,175</b>	<b>\$ 984,521</b>	<b>\$ 1,492,250</b>	<b>\$ 1,623,510</b>	<b>\$ -</b>					
<b>Total CIP Projects (Stormwater):</b>		<b>\$ 38,524,276</b>	<b>\$ 353,673</b>	<b>\$ 353,673</b>	<b>\$ 361,800</b>	<b>\$ 497,597</b>	<b>\$ 698,767</b>	<b>\$ 445,190</b>	<b>\$ 318,823</b>	<b>\$ 246,092</b>	<b>\$ 658,679</b>	<b>\$ 593,683</b>	<b>\$ 1,357,246</b>	<b>\$ 1,357,246</b>	<b>\$ 1,246,188</b>	<b>\$ 1,246,188</b>	<b>\$ 1,757,580</b>	<b>\$ 2,669,225</b>	<b>\$ 2,669,225</b>	<b>\$ 2,669,225</b>	<b>\$ 2,669,225</b>	<b>\$ 2,015,502</b>	
<b>10-Year CIP Project Total (Water &amp; Wastewater):</b>												<b>\$ 31,997,463.90</b>											
<b>10-Year CIP Project Total (Stormwater):</b>												<b>\$ 4,527,874</b>											
<b>10-Year CIP Project Total (Water &amp; Wastewater):</b>												<b>\$ 6,891,041.25</b>											
<b>10-Year CIP Project Total (Stormwater):</b>												<b>\$ 19,003,127</b>											

Table 7-3:  
Priority Listing (30-  
Stormwater

Integrated Project  
Year CIP for  
Improvements)

Project Number	Project Name	Total Cost	Budget Cost per Year									
			Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
<b>Potable Water Projects</b>												
PW-1	Dixie Highway 10-inch Water Main Improvements	\$ 1,644,603.75										
PW-2	NW 30th Court & West Oakland Park Boulevard Water Main Replacement	\$ 2,567,598.75										
PW-3	Wilton Manors West Phase I Water Main Replacement	\$ 1,727,298.00										
PW-4	NW 29th Street Water Main Replacement	\$ 1,458,310.50										
PW-5	NW 9th Avenue & NW 26th Street Water Main Replacement	\$ 289,912.50										
PW-6	Wilton Manors East Phase I Water Main Replacement	\$ 3,645,438.75										
PW-7	Wilton Manors Grove & NE 21st Street Water Main Replacement	\$ 1,186,713.45										
PW-8	Wilton Manors South Water Main Replacement	\$ 2,382,952.50										
PW-9	NE 28th Street Water Main Replacement	\$ 1,739,508.75										
PW-10	NE 21st Court Water Main Replacement	\$ 430,751.25										
PW-11	Andrews Avenue 8-inch Water Main Replacement	\$ 1,588,545.00										
PW-12	NW 9th Avenue 6-inch Water Main Replacement	\$ 1,202,175.00										
PW-13	Wilton Manors West Phase II Water Main Replacement	\$ 984,521.25										
PW-14	NW 26th Street and NW 8th Avenue Water Main Replacement	\$ 1,492,290.00										
PW-15	NE 24th, 25th, and 26th Street Water Main Replacement	\$ 1,623,510.00										
PW-16	Wilton Manors East Phase II Water Main Replacement	\$ 3,732,716.25										
PW-17	Wilton Manors East Phase III Water Main Replacement	\$ 3,842,808.75										
<b>Potable Water Projects Subtotal:</b>		<b>\$ 31,539,654</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Wastewater Projects</b>												
WW-1	Lift Station No. 11 Pump Impeller Upgrade*	\$ 22,477.50										
WW-2	Lift Station No. 1 Replacement and Force Main Replacement	\$ 671,005.82										
WW-3	Lift Station No. 4 Service Basin Lining	\$ 199,390.41										
WW-4	Lift Station No. 4 Replacement	\$ 593,735.67										
WW-5	Lift Station No. 2 Replacement	\$ 612,908.98										
WW-6	Lift Station No. 5 Service Basin Lining*	\$ 1,571,529.40										
WW-7	Lift Station No. 5 Electrical, Pumps, and Force Main Replacement*	\$ 566,845.09										
WW-8	Gravity Main Trunkline Replacement*	\$ 5,502,991.50										
WW-9	Lift Station No. 3 Service Basin Lining*	\$ 1,256,724.52										
WW-10	Lift Station No. 3 Replacement and Force Main Replacement*	\$ 1,549,449.00										
WW-11	Lift Station No. 7 Service Basin Lining*	\$ 409,862.23										
WW-12	Lift Station No. 7 Replacement and Force Main Replacement*	\$ 659,022.84										
WW-13	Lift Station No. 6 Pump and Force Main Replacement*	\$ 514,622.36										
WW-14	Lift Station No. 8 Odor Control, Electrical, Pumps and Force Main Replacement*	\$ 342,856.80										
WW-15	Lift Station No. 10 Service Basin Lining	\$ 1,273,275.45										
WW-16	Lift Station No. 10 Rehabilitation	\$ 225,374.40										
<b>Wastewater Projects Subtotal:</b>		<b>\$ 15,972,052</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Stormwater Projects</b>												
SW-1	Coral Gardens Drive Outfalls & Stormwater System Improvements	\$ 707,346.00										
SW-2	NE 28th Drive Outfall Improvements	\$ 239,908.50										
SW-3	NE 14th Avenue Outfall Improvements	\$ 121,891.50										
SW-4	NW 24th Street to NW 22nd Street Stormwater System & Outfall Improvements	\$ 497,596.50										
SW-5	NW 3rd Avenue Stormwater System & Outfall Improvements	\$ 698,766.75										
SW-6	NE 30th Street Outfall Improvements	\$ 337,149.00										
SW-7	NE 28th Drive Outfall Improvements	\$ 108,040.50										
SW-8	NE 7th Terrace Stormwater System and Outfall	\$ 227,812.50										
SW-9	NE 17th Avenue Stormwater Outfall Improvements	\$ 91,010.25										
SW-10	NE 27th Drive Stormwater Exfiltration Trench	\$ 246,091.50										
SW-11	NW 25th Street Stormwater Exfiltration Trench	\$ 658,678.50										
SW-12	NE 25th Street & NE 8th Terrace Stormwater Exfiltration Trench	\$ 593,682.75										
SW-13	NE 16th Ave & NE 28th Dr Pump Station and Related Improvements	\$ 2,714,492.45										
SW-14	NE 18th Ave & Coral Gardens Dr Pump Station and Related Improvements	\$ 2,492,375.59										
SW-15	NE 14th Ave & NE 15th Ave Pump Station and Related Improvements	\$ 1,757,580.08										
SW-16	NW 6th Ave & NW 22nd St Pump Station and Related Improvements	\$ 8,007,675.42										
SW-17	W Ave & NW 20th St Pump Station and Related Improvements	\$ 4,031,003.50										
SW-18	NE 24th St & NE 16th Ave Pump Station and Related Improvements	\$ 4,344,675.93	\$ 2,172,338	\$ 2,172,338								
SW-19	NE NE 24th St & NE 20th Ave Pump Station and Related Improvements	\$ 7,177,649.97			\$ 2,392,550	\$ 2,392,550	\$ 2,392,550					
SW-20	NE 27th Dr & Coral Gardens Dr Drainage Improvements	\$ 549,474.27						\$ 549,474				
SW-21	NW 6th Ave & NW 29th St Pump Station and Related Improvements	\$ 2,921,374.91							\$ 1,460,687	\$ 1,460,687		
<b>Stormwater Projects Subtotal:</b>		<b>\$ 38,524,276</b>	<b>\$ 2,172,338</b>	<b>\$ 2,172,338</b>	<b>\$ 2,392,550</b>	<b>\$ 2,392,550</b>	<b>\$ 2,392,550</b>	<b>\$ 549,474</b>	<b>\$ 1,460,687</b>	<b>\$ 1,460,687</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total CIP Projects (Water &amp; Sewer):</b>		<b>\$ 47,511,706</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total CIP Projects (Stormwater):</b>		<b>\$ 38,524,276</b>	<b>\$ 2,172,338</b>	<b>\$ 2,172,338</b>	<b>\$ 2,392,550</b>	<b>\$ 2,392,550</b>	<b>\$ 2,392,550</b>	<b>\$ 549,474</b>	<b>\$ 1,460,687</b>	<b>\$ 1,460,687</b>	<b>\$ -</b>	<b>\$ -</b>
<b>30-Year CIP Project Total (Water &amp; Wastewater):</b>												<b>\$ -</b>
<b>30-Year CIP Project Total (Stormwater):</b>												<b>\$ 14,993,175</b>