

8. Project Ranking and Summary

Each of the projects identified in the 2020 SDP Update was assigned to one of the six project categories (Section 6.2). The following number of projects and estimated project cost was assigned to each category as follows for a total of 59 projects with a total estimated capital cost of \$400,000,000:

- 1) Public Health Regulatory Requirements (4 projects, \$32,400,000)
- 2) Public Health Initiatives (1 project, \$5,000,000)
- 3) Rehabilitation and Replacement (40 projects, \$263,860,000)
- 4) System Expansion (3 projects, \$68,000,000)
- 5) System Extension (9 projects, \$27,550,000)
- 6) Mayor and Commission Strategic Commitments and KPIs (2 projects, \$3,190,000)

After the project categories were assigned, projects within each category were ranked according to the appropriate methodology outlined in Section 6.3 and the project timing (Section 8.7). Project numbers were then assigned based on the category, timing of need, and type of project; water, wastewater, or utility services.

Table 8-1 summarizes the four projects assigned to Priority 1. Implementation of these projects would depend on the timeline provided by the Georgia Environmental Protection Division (GAEPD). Based on current information, all PUD water and wastewater systems are currently in compliance. The projects included in Priority 1 are in anticipation of upcoming regulations. Modeling to determine nutrient limits for lakes has been completed. GAEPD has begun assigning permit limits to upstream dischargers to Lake Oconee. The projects in Table 8-1 are listed in order of their ranking.

Table 8-1: Priority 1 – Public Health Regulatory Requirements Projects

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SDP Project Number	Project Name	Project Cost ¹ (2020 Dollars)
Priority 1 – Water System		
1-301	Future Drinking Water Regulations	\$1,000,000
Priority 1 – Wastewater System		
1-302	North Oconee WRF – Total Phosphorus Polishing	\$11,100,000
1-303	Middle Oconee WRF – Total Phosphorus Polishing	\$14,000,000
1-304	Cedar Creek WRF – Total Phosphorus Polishing	\$6,300,000
Priority 1 Total		\$32,400,000

¹ Costs for projects in previous SDP update have been updated to reflect changes in project scope and pricing.

8.1 Public Health Initiatives Projects

Table 8-2 summarizes the project assigned to Priority 2. This project involves alternative sewer solutions for two basins: Sandy Creek (see Figure 4-2) and Lower Shoal Creek (see Figure 4-4). Further discussion of the current wastewater service in these areas is found in Section 4.2.3.2 Expanded Public Sewer Service Area.

Based on the motion approved by M&C in 2015, Public Health Initiatives Projects shall utilize solutions other than gravity sewer lines, shall avoid environmentally sensitive areas, and shall serve only existing structures or lots of record. Expanded service would be implemented only after approval by M&C.

Table 8-2: Priority 2 – Public Health Initiatives Projects
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SDP Project Number	Project Name	Project Cost ¹ (2020 Dollars)
Priority 2 – Water System		
	There were no Priority 2 water projects identified	
Priority 2 – Wastewater System		
2-301	Alternative Sewer Solutions	\$5,000,000
	Priority 2 Total	\$5,000,000

¹Costs for projects in previous SDP update have been updated to reflect changes in project scope and pricing.

8.2 Rehabilitation and Replacement Projects

Table 8-3 summarizes the 40 projects assigned to Priority 3. Each of these projects was identified as necessary to maintain current water and wastewater systems consistent with existing permits. The projects include replacement or rehabilitation of system components due to age or condition, as well as projects that are necessary to ensure reliable service to the existing water and wastewater customers served by ACC-PUD. Water system Priority 3 projects are shown on Figures 2-3 and 4-1. Wastewater system Priority 3 projects are shown on Figures 2-8 through 2-10 and Figures 4-2 through 4-4.g

Table 8-3: Priority 3 – Rehabilitation and Replacement Projects
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SDP Project Number	Project Name	Project Cost ¹ (2020 Dollars)
Priority 3 – Water System		
3-301	Upgrade Aging Water Mains	\$20,000,000
3-302	Water Main Transmission Redundancy	\$4,000,000
3-303	Small Diameter Water Main Replacement	\$15,000,000
3-304	Middle Oconee River Raw Water Pump Station	\$460,000
3-305	North Oconee River Raw Water Pump Station	\$800,000
3-306	Water Main Connection Reliability (Improved Water Quality & Fire Protection)	\$8,500,000
3-307	J. G. Beacham Water Treatment Plant Solids Handling	\$20,000,000
	Priority 3 Water System Total	\$68,760,000
Priority 3 – Wastewater System		
3-308	Tanyard Branch Interceptor Improvements	\$10,300,000

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Table 8-3: Priority 3 – Rehabilitation and Replacement Projects
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SDP Project Number	Project Name	Project Cost ¹ (2020 Dollars)
3-309	Brooklyn Creek Interceptor Improvements	\$11,600,000
3-310	Upper North Oconee Interceptor – Phase 2B	\$11,500,000
3-311	Upper North Oconee Interceptor – Phase 2C	\$8,400,000
3-312	Middle Oconee East Millway	\$1,000,000
3-313	Sanford Stadium Interceptor Improvements Phase 1	\$5,800,000
3-314	Middle Oconee East Trunk Improvements Phase 1	\$13,000,000
3-315	North Oconee WRF - Aeration Basins	\$800,000
3-316	Mitchell Bridge Interceptor Improvements	\$6,000,000
3-317	McNutt Interceptor Improvements Phase 1	\$14,000,000
3-318	Prioritized Sewer Rehabilitation and Replacement	\$8,000,000
3-319	Middle Oconee WRF Electrical Building	\$6,200,000
3-320	North Oconee WRF - Thermal Dryer	\$12,000,000
3-321	Hampton Park Interceptor	\$1,500,000
3-322	Cedar Creek WRF Emergency Generator	\$6,000,000
3-323	Middle Oconee West Trunk Improvements Phase 1	\$12,500,000
3-324	Voyles Road Sanitary Sewer Upgrade	\$3,900,000
3-325	Targeted Flow Monitoring	\$500,000
3-326	Upper North Oconee West Trunk Improvements	\$2,900,000
3-327	North Oconee WRF - Biosolids Upgrades	\$35,000,000
3-328	Kingswood Collector Improvements	\$1,100,000
3-329	Long-term SSES and Rehabilitation Program	\$500,000
3-330	North Oconee WRF - Aeration Basins Small Blower	\$1,100,000
3-331	Middle Oconee WRF Operations Building	\$2,000,000
3-332	Middle Oconee WRF - Enhanced Biological Phosphorus Removal Basin Cover	\$800,000
3-333	Middle Oconee WRF Influent Pumps	\$2,200,000
3-334	Cedar Creek WRF Influent Pumps	\$1,200,000
3-335	North Oconee WRF - Influent Grinder	\$1,300,000
3-336	Cedar Creek Interceptor Improvements - Phase 1	\$2,500,000
3-337	Middle Oconee WRF - Influent Grinder	\$500,000
3-338	Turkey Creek Interceptor Improvements	\$1,500,000
3-339	Cedar Creek WRF – Influent Grinder	\$500,000
	Priority 3 Wastewater System Total	\$186,100,000

Table 8-3: Priority 3 – Rehabilitation and Replacement Projects
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SDP Project Number	Project Name	Project Cost ¹ (2020 Dollars)
Priority 3 – Utility Wide		
3-340	Combined Meter Management/Water and Sewer Facility	\$9,000,000
	Priority 3 Utility Wide Total	\$9,000,000
	Priority 3 Total	\$263,860,000

¹Costs for projects in previous SDP update have been updated to reflect changes in project scope and pricing.

8.3 System Expansion Projects

Table 8-4 summarizes the 3 projects assigned to Priority 4. System expansion projects add capacity in existing service areas in order to provide service for new customers. In some cases, system expansion is driven by the increased demands of an existing customer.

Table 8-4: Priority 4 – System Expansion Projects
2020 Service Delivery Plan Update – Capital Improvements Element

SDP Project Number	Project Name	Project Cost (2020 Dollars)
Priority 4 – Water System		
4-301	Additional Storage	\$15,000,000
4-302	Atlanta Highway Tank and Booster Pump Station	\$8,000,000
4-303	Water Supply Resiliency and Reliability	\$45,000,000
Priority 4 – Wastewater System		
	There are no Priority 4 wastewater projects identified	
	Priority 4 Total	\$68,000,000

¹Costs for projects in previous SDP update have been updated to reflect changes in project scope and pricing.

8.4 System Extension Projects

For the 2020 SDP Update, no water extension projects were identified. Table 8-5 summarizes recycled water projects and the 6 wastewater projects assigned to Priority 5, that extend wastewater collection within the existing public sewer Service Area. Wastewater system extension projects are shown on Figure 4-2 (North Oconee Basin) and Figure 4-3 (Middle Oconee Basin).

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Table 8-5: Priority 5 – System Extension Projects
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SDP Project Number	Project Name	Project Cost (2020 Dollars)
Priority 5 – Recycled Water System		
5-301	UGA Recycled Water Transmission Line	\$1,600,000
5-302	North Oconee WRF Recycled Water Facility	\$3,400,000
5-303	Athena Industrial Park Recycled Water Transmission Line	\$14,000,000
	Priority 5 Recycled Water System Total	\$19,000,000
Priority 5 – Wastewater System		
5-304	Trail Creek East/West – Project 3 (TCE-3)	\$1,200,000
5-305	Trail Creek East/West – Project 4 (TCE-2, TCE-4)	\$1,400,000
5-306	Bear Creek Extension (BC-2)	\$1,500,000
5-307	Lower Middle Oconee Extension (LMO-8)	\$2,000,000
5-308	Turkey Creek Extension (TC-2)	\$1,700,000
5-309	Upper North Oconee/North Oconee River East Extension (UNO-8)	\$750,000
	Priority 5 Wastewater System Total	\$8,550,000
	Priority 5 Total	\$27,550,000

¹Costs for projects in previous SDP update have been updated to reflect changes in project scope and pricing.

8.5 Mayor and Commission Strategic Commitments and Key Performance Indicators Projects

Table 8-6 summarizes the 2 Priority 6 projects. These two utility wide projects will help to improve overall performance of the utility.

Table 8-6: Priority 6 – Mayor and Commission Strategic Commitments Projects
2020 Service Delivery Plan Update – Capital Improvements Element

SDP Project Number	Project Name	Project Cost (2020 Dollars)
Priority 6 – Utility Wide		
6-301	Billing System Project	\$400,000
6-302	Alternate Energy	\$2,790,000
	Priority 6 Total	\$3,190,000

¹Costs for projects in previous SDP update have been updated to reflect changes in project scope and pricing.

8.6 Project Timing

With each of the 59 recommended capital improvement projects prioritized and ranked within their respective categories, projects were then ranked against each other based on time of need for the improvement. PUD staff used the project ranking methodology discussed in Section 6 and the time of need of the capital improvements to identify the timing of the capital improvement projects relative to each other. For example, a Priority 1 capital project may be needed later than a Priority 3 project depending on when regulatory requirements require the Priority 1 project to be completed.

Table 8-7 lists each of the recommended capital improvement projects based on time of need to be completed.

Table 8-7: Project Timing for Capital Improvement Projects
 2020 Service Delivery Plan Update –Capital Improvements Element

SDP Project Number	Project Name	Project Timing
1-302	North Oconee WRF – Total Phosphorus Polishing	1
1-303	Middle Oconee WRF – Total Phosphorus Polishing	2
3-308	Tanyard Branch Interceptor Improvements	3
3-309	Brooklyn Creek Interceptor Improvements	4
3-310	Upper North Oconee Interceptor – Phase 2B	5
3-311	Upper North Oconee Interceptor – Phase 2C	6
5-301	UGA Recycled Water Transmission Line	7
1-304	Cedar Creek WRF – Total Phosphorus Polishing	8
5-302	North Oconee WRF Recycled Water Facility	9
1-301	Future Drinking Water Regulations	10
3-312	Middle Oconee East Millway	11
4-301	Additional Storage	12
6-301	Billing System Project	13
3-313	Sanford Stadium Interceptor Improvements Phase 1	14
2-301	Alternative Sewer Solutions	15
3-340	Combined Meter Management/Water and Sewer Facility	16
3-314	Middle Oconee East Trunk Improvements Phase 1	17
3-301	Upgrade Aging Water Mains	18
3-315	North Oconee WRF – Aeration Basins	19
3-316	Mitchell Bridge Interceptor Improvements	20
3-317	McNutt Interceptor Improvements Phase 1	21
3-318	Prioritized Sewer Rehabilitation and Replacement	22
3-319	Middle Oconee WRF Electrical Building	23
3-320	North Oconee WRF – Thermal Dryer	24
3-321	Hampton Park Interceptor	25

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Table 8-7: Project Timing for Capital Improvement Projects
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SDP Project Number	Project Name	Project Timing
5-304	Trail Creek East/West – Project 3 (TCE-3)	26
3-302	Water Main Transmission Redundancy	27
3-303	Small Diameter Water Main Replacement	28
3-322	Cedar Creek WRF Emergency Generator	29
5-323	Middle Oconee West Trunk Improvements Phase 1	30
5-303	Athena Industrial Park Recycled Water Transmission Line	31
3-324	Voyles Road Sanitary Sewer Upgrade	32
3-304	Middle Oconee River Raw Water Pump Station	33
3-305	North Oconee River Raw Water Pump Station	34
3-325	Targeted Flow Monitoring	35
4-302	Atlanta Highway Tank and Booster Pump Station	36
4-303	Water Supply Resiliency and Reliability	37
3-326	Upper North Oconee West Trunk Improvements	38
3-306	Water Main Connection Reliability for Improved Water Quality and Fire Protection	39
3-327	North Oconee WRF - Biosolids Upgrades	40
3-328	Kingswood Collector Improvements	41
3-329	Long-term SSES and Rehabilitation Program	42
3-307	J. G. Beacham Water Treatment Plant Solids Handling	43
3-330	North Oconee WRF – Aeration Basins Small Blower	44
3-331	Middle Oconee WRF Operations Building	45
3-332	Middle Oconee WRF – Enhanced Biological Phosphorus Removal Basin Cover	46
6-302	Alternate Energy	47
5-305	Trail Creek East/West – Project 4 (TCE-2, TCE-4)	48
3-333	Middle Oconee WRF Influent Pumps	49
3-334	Cedar Creek WRF Influent Pumps	50
3-335	North Oconee WRF – Influent Grinder	51
3-336	Cedar Creek Interceptor Improvements – Phase 1	52
3-337	Middle Oconee WRF – Influent Grinder	53
3-338	Turkey Creek Interceptor Improvements	54
3-339	Cedar Creek WRF – Influent Grinder	55
5-306	Bear Creek Extension (BC-2)	56

Table 8-7: Project Timing for Capital Improvement Projects
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SDP Project Number	Project Name	Project Timing
5-307	Lower Middle Oconee Extension (LMO-8)	57
5-308	Turkey Creek Extension (TC-2)	58
5-309	Upper North Oconee/North Oconee River East Extension (UNO-8)	59

8.7 Summary and Next Steps

The following pages include project details for each of the 59 recommended improvements included in the Infrastructure Element and Capital Improvements Element. The Financial Element will be updated based on this document and will identify the funding sources to be used for each project category and the source of funds and financing mechanisms necessary to implement these projects. Also included in the Financial Element will be a schedule for the project implementation which is crucial to PUD's rate setting process. Project prioritization may be modified, based on funding or financials availability. .