Proposal for

SOUTHLAND WATER RESOURCE PROJECT

[SFWMD Procurement Bureau]

PHILLIPS & JORDAN, INC.

30115 State Road 52
Suite 301
San Antonio, FL 33576
pandj.com

10142 Parkside Drive
Suite 500
Knoxville, TN 37922
pandj.com

Matt Eidson
meidson@pandj.com
941.705.9558

July 1, 2024

South Florida Water Management District
Procurement Bureau
B-1 Building, 2nd Floor West
3301 Gun Club Rd.
West Palm Beach, Florida 33406

Subject:
Unsolicited Proposal – Southland Water Resource Project
Proposer:
Phillips and Jordan Inc.
c/o Matt Eidson
30115 State Road 52
Suite 301
San Antonio, Fl 33576

To whom it may concern,

On behalf of Phillips and Jordan Inc. we are pleased to present our qualified project proposal for consideration of the Southland Water Resource Project.

Pursuant to SFWMD Guidance document issued on June 25, 2024, and in accordance with Florida State Statute Chapter 255, Section 065: Public-Private Partnerships, subsection I "Qualifying Projects" identification item 3 "a water, wastewater, or surface water management facility or other related infrastructure," we believe our project meets or exceeds the qualifying factors of the Guidance document and State Statute.

The Southland Water Resource Project as proposed would make available an additional +/-100,000 to 120,000 acre/feet of functioning low hazard water storage with conveyance facilities constructed on approximately 8,000 acres for use within the Everglades region at the discretion of the South Florida Water Management District. As previously discussed with you, other staff and briefly at a Governing Board meeting last Fall, the Southland Water Resources Project is located immediately north of the A-2 STA and A-2 Reservoir in an area identified as appropriate for restoration activities and would be developed as a compliment to those projects. We are also evaluating the potential for areas within the project to treat Lake Okeechobee water routed from the Miami Canal, understanding that water quality treatment of water from Lake Okeechobee is a high priority for the District.

Our team has secured consent to construct this facility in partnership with the landowners and our industry partners to be delivered in accordance with all SFWMD Standards and all applicable State and Federal Regulations.

Phillips and Jordan has completed the necessary hydraulic modeling, seepage analysis, and water availability analysis through our various District qualified consultants to identify any potential fatal flaws of the project and to date the project analysis is performing better than expected. P&J is currently in the design phase of the project and has reached approximately 40% design.

Currently our team has completed and submitted applications for ERP permitting to FDEP and Conditional Use approval to Palm Beach County, and we are working through the request for additional information phases with both. We expect to be complete in the coming months.

We understand that the District has significant responsibilities and obligations for Everglades restoration, flood control, and water supply, along with limited funding for those purposes. Under no circumstances would any funds be diverted from District projects to the Southland Water Resources Project, and we would not be looking to the District for any construction funding.

We are asking the District to accept this project under the Guidance and identify the site as appropriate for a water management project associated with ecosystem restoration consisting of water storage and related conveyance features where such uses provide viable alternative technologies for water management, subject to final design, permitting and approval of construction plans and specifications. This is the same approach that was taken with our C-51 Reservoir project, Phase 1 of which is complete and Phase 2 of which is under construction.

Included with this letter you will find the project location map, our current water availability analysis, seepage modeling results, chlorides testing results, and phasing plan.

Upon acceptance our team looks forward to providing South Florida Water Management District with more detailed information on project delivery, funding approach, and continued project planning discussions. We look forward to your response.

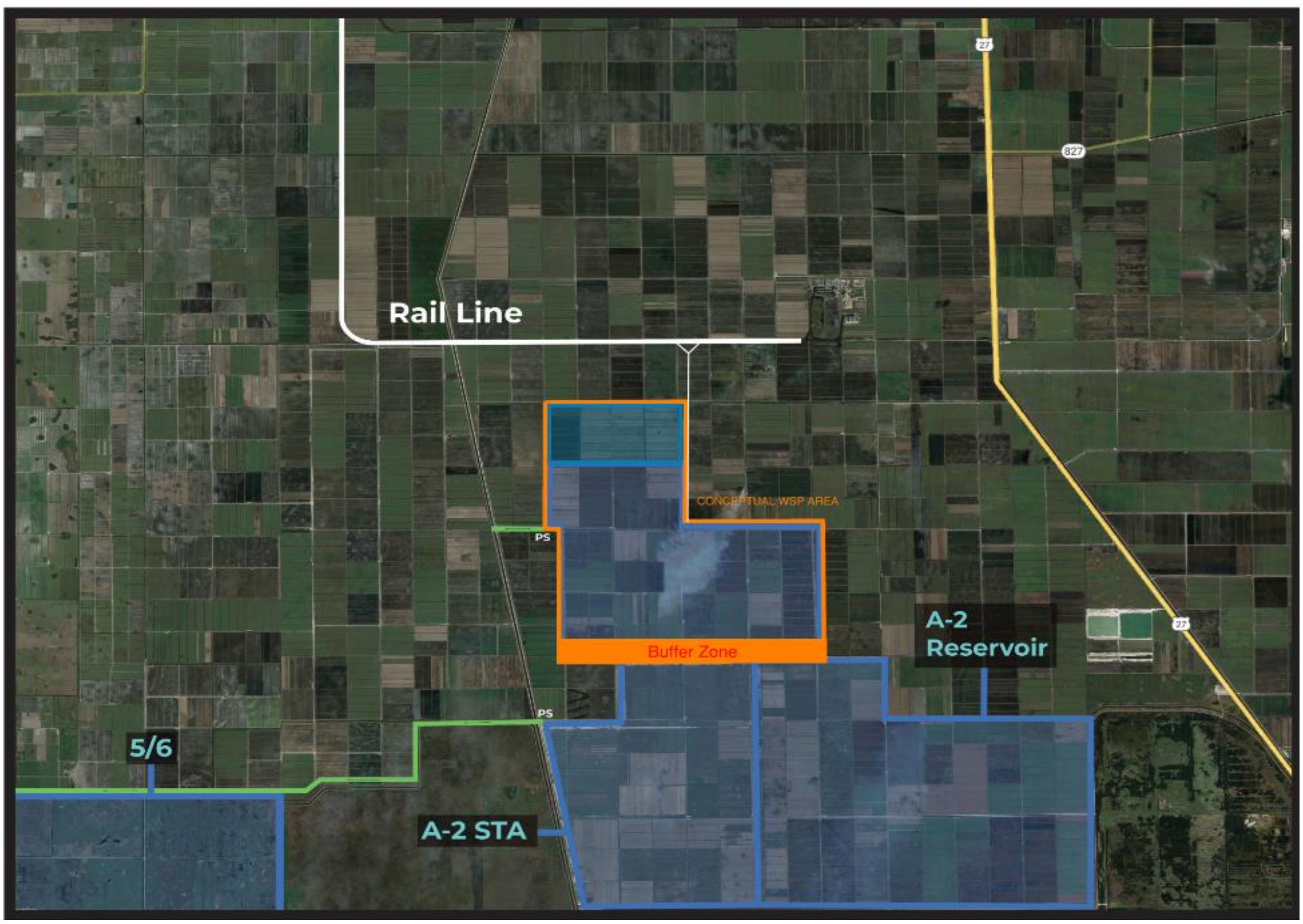
Thank You,

Matt Eidson Digitally signed by Matt Eidson
DN: C=US, E=meidson@pandj.com, O="Phillips and Jordan Inc. ", CN="Matt Eidson "
Date: 2024.07.01 16:15:24-04'00'

Matt Eidson
Regional Manager
Phillips and Jordan Inc.
941.705.9558

The Southland Water Resource project is located within the Evergaldes Agricultural Area, north of the A2 Stormwater Treatment Area and A2 Reservoir. The project will receive water from the Miami Canal which flows from north to south on the western side of the project. Water will be directed into the reservoir as it is discharged from Lake Okeechobee.

During the continued design and engineering phase our team is working to identify potential vegetative treatment space within this footprint to further enhance the value of the project. Working in collaboration with SFWMD will allow both teams to find the most ecologically valuable and flexible design to suit the District's needs to enhance and complement current and future projects.



Our team's phased approach to delivery allows for early beneficial use of the project as new cells are completed. Currently our design allows for early delivery of cells 1-3, pump station, and conveyance canal improvements. Overall, the project design consists of 13 individual storage cells, perimeter seepage canals, perimeter cutoff walls, and internal conveyance breaches as we bring additional cells online. Construction phasing, hardening of levees and resulting depth of storage will be based on available funding, separate from District projects and District funds, all in close coordination with the District.

These features combined make it possible to control internal seepage, which is already at a minimum, as well as ensure that we in no way affect the surrounding landowners and the agricultural operations.

The excavated material will be removed from each cell and exported from the site via rail, which ensures that we have no impact to surrounding property owners as well as no impact to the traveling public. An added benefit to this approach is accelerated construction. This approach delivers valuable storage space to be available in this region much faster than traditional delivery models.

Current Project Status:

- All necessary land agreements are in place giving consent to construct a water storage facility.
- Boundary survey of project is complete.
- All necessary preliminary design geotechnical data has been collected, additional geotechnical borings are under way for rail design, facility design, and geo mapping of the site.
- Monitoring wells have been installed and have collected 6 months of data.
- Water sampling has been conducted and is continuing.
- Preliminary 3D groundwater modeling has taken place and is ongoing. This includes both on and offsite impact studies in correlation to the A2 STA and Reservoir.
- Water availability analysis has been completed identifying the project does have available water for use.
- Preliminary seepage modeling has been conducted and has performed better than early fatal flaw analysis that was previously submitted to SFWMD.
- All T/E surveys have been completed with no impacts identified. Meetings with and USFWS have been held and no further action is required at this time.
- CRAS survey has been completed and there are no identified sites within the project boundary.
- FDEP site visit has been completed and RAI response draft is underway.
- Currently our Engineer of Record is at an estimated 40% project design stage.
- Our rail spur design engineer is at approximately 30% design.
- FDOT traffic study has been completed, there will be no trucking impacts and FDOT has conceded no further surveys are required.
- The team has held two open workshops with Palm Beach County zoning staff, we have prepared sufficient draft responses with County input and are awaiting final identification letter from SFWMD to complete response.
- Complete records and resources of all of the above can be provided upon request.

Exhibits Attached:

A: Southland Water Availability Analysis - 6-14-2024

B: Southland Preliminary 3D Groundwater Model - 8-1-2023

C: Chlorides Testing Results

Exhibit A

Water Availability Analysis Evaluating the Performance of the Southland Project Reservoir

Results of Water Budget Model of the Southland Project Reservoir

June 18, 2024

Prepared by

MacVicar Consulting, Inc.
4524 Gun Club Road, Suite 201
West Palm Beach, FL 33415

Background

The Southland Project is a proposed water resource project located in the Everglades Agricultural Area. The project is located adjacent to the Miami Canal where it can collect excess agricultural runoff in wet periods and deliver water for beneficial uses in dry periods. Since completion, the Stormwater Treatment Area (STA) 5/6 Complex in the South Florida Water Management District (SFWMD) has been hampered by frequent dry-outs due to the lack of water that can be delivered to the headwater of the STA-5N. A water availability analysis (WAA) was performed to better understand the availability of source water that the proposed Southland Project Reservoir (Reservoir) could store and send to benefit STA-5N (Figure 1). The WAA evaluated different outflow capacities of the STA-5N to determine the balance between what amount of water that could be sent to STA-5N, while best utilizing the storage volume available in the facility. Sending too much water through STA-5N would keep the Reservoir and STA-5N at lower water level elevations for extended periods of time, while sending too little water through STA-5N would not fully utilize the reservoir's storage capacity and as well as limit the benefits to STA-5N.

Evaluating the Performance of the Southland Project Reservoir and Deliveries to STA-5N

A daily water budget spreadsheet model was developed to estimate the availability of source water. The time series basis of the model is the RSM-BN output for the LOSOM PA25 model run. PA25 is the preferred Lake Okeechobee Regulation Schedule that is expected to be in place by August 2024. The RSM-BN analysis period is 52 years (1965 through 2016) which includes several drought years and several extreme wet years ensuring that there are representative conditions to evaluate water availability and performance of the Reservoir.

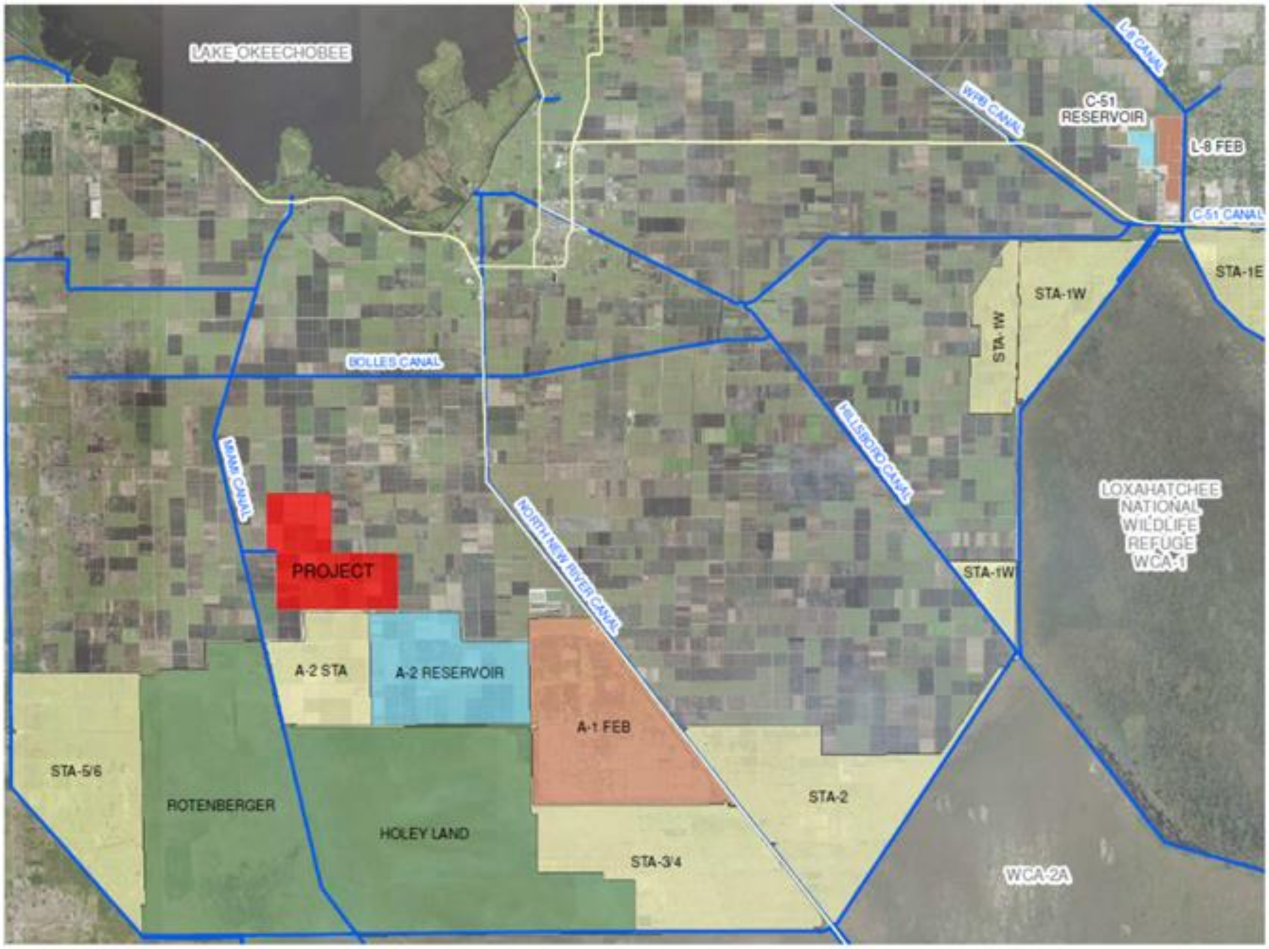


Figure 1. The proposed Southland Project is located south of the Bolles Canal and east of the Miami Canal. It borders the northern boundary of the SFWMD's A-2 STA and A-2 Reservoir.

Design Criteria

Reservoir Design

Figure 2 illustrates the cell sizes and storage capacities of the proposed Reservoir. The total area of the Reservoir is 6,077 acres, with a total storage capacity of 97,232 acre-feet (ac-ft). The cells will be excavated to an elevation of -9 feet NAVD88 and have a top of bank elevation of +21.5 feet NAVD88. The design minimum water elevation is -3 feet NAVD88 and a design high water elevation is +13 feet NAVD88. A soil bentonite cutoff-wall will be constructed where appropriate to a design bottom elevation of -31.4 feet NAVD88 to control seepage.

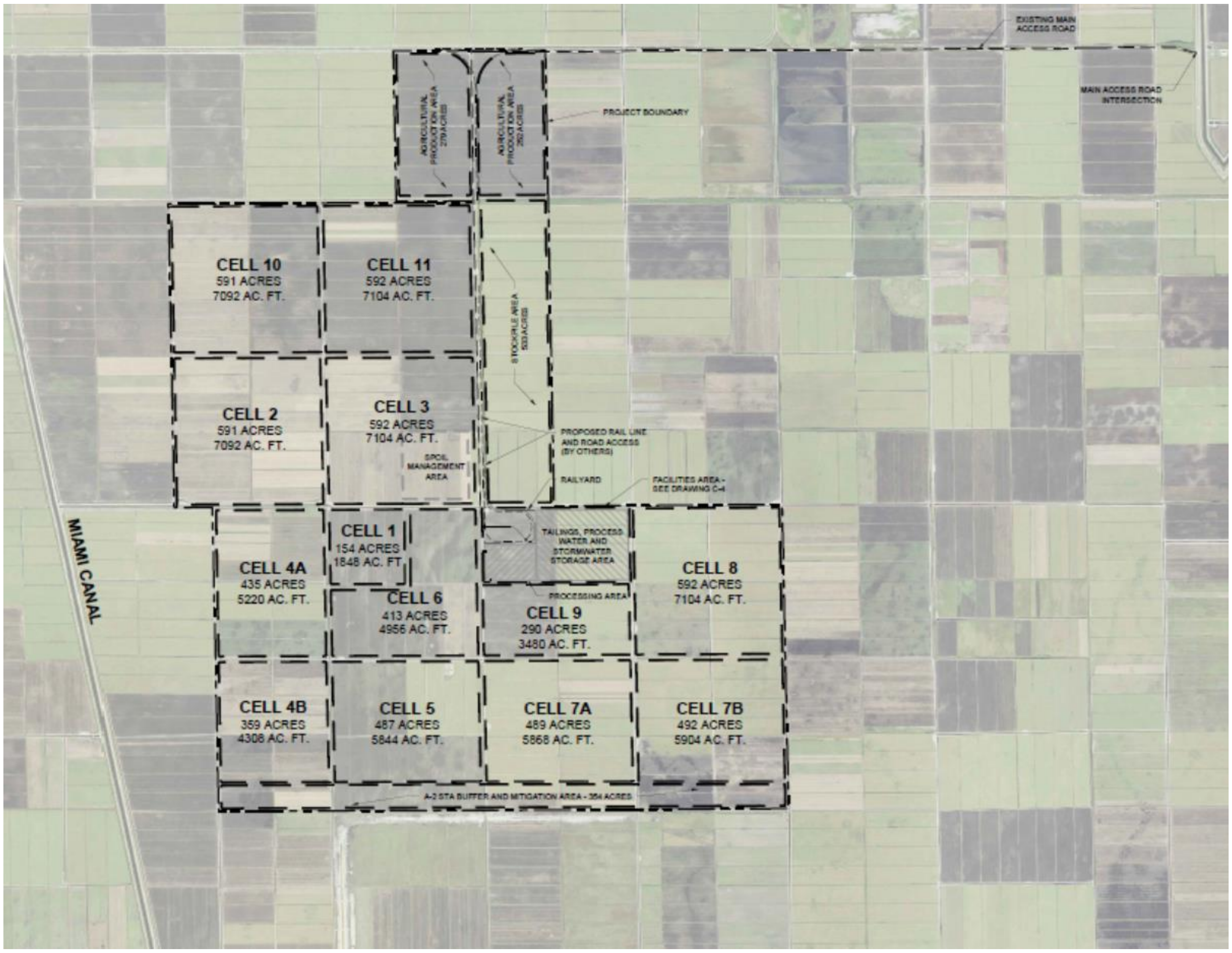


Figure 2. The Reservoir's cell sizes and storage capacities

Model Input for Southland Reservoir

Area = 6,077 acres

Operating range = -3 to +13 NAVD88 = 16 feet

Total storage capacity = 97,232 ac-ft

Model Input for STA-5N

Area = 4,851 acres

Target depth = 18 inches

Model Parameters

The Lake Okeechobee System Operating Manual (LOSOM) Regional System Model Basins (RSMBN) model is the source for the following parameters:

- Daily flow data for runoff into the Miami Canal
- Daily irrigation data from the Miami Canal
- Daily flow data for STA-5N
- Daily rainfall data
- Daily evapotranspiration (ET) data
- Daily seepage loss from STA-5N
- Daily water level for STA-5N – The Base Run is defined as the daily stage from the LOSOM RSMBN model.
- Reservoir groundwater seepage rate was based on a 3-D groundwater model by Collective Water Resources, LLC (this is only for tracking purposes and not for the water budget)

Model Operating Assumptions and Simulations

While many scenarios were simulated, the following operating assumptions are the most representative of the benefits of the Southland Reservoir to STA-5N. The operating assumptions for the alternatives are:

- Southland Reservoir
    - Inflow capacity =
        - 1,000 cfs inflow up to an elevation of +7.0’ NAVD88, which is the average water control elevation in the area.
        - 300 cfs above elevation +7.0’ NAVD88
    - Outflow capacity = 300 cfs
    - Maximum elevation = +13’ NAVD88
    - Minimum elevation = -3’ NAVD88

    - Runoff cutoff = 500 cfs
        - Runoff cutoff is the amount of runoff allowed to bypass the Southland Reservoir Project and go to the A-1 FEB/STA 3/4 initially (and ultimately the A-2 complex).
- STA-5N
    - Inflow capacity = 300 cfs
    - Extra outflow flow capacity = variable
    - Extra outflow allowed when depth > 6”
    - Target depth = 18”

Four alternatives were simulated using the above-described operating assumptions. The alternatives show how much water can be moved through the STA-5N and what the impact is on the Reservoir and STA-5N. Table 1 illustrate the inputs used for the 4 alternatives and please note that there is a Base Run for the STA-5N which is defined as the daily stage from the LOSOM RSMBN model:

Table 1. The summary of inputs for the Alternatives
(Note: The Extra Outflow Capacity is what is changing between the Alternatives)

Alternative	Southland Reservoir		STA5N		
	Reservoir Inflow (cfs) and elevation	Reservoir Outflow (cfs)	Target Depth (inch)	Extra Outflow Capacity (cfs)	Extra Outflow Capacity start Elevation (inch)
1	1,000/300, 7.0'	300	18.0	300	6.0
2	1,000/300, 7.0'	300	18.0	200	6.0
3	1,000/300, 7.0'	300	18.0	100	6.0
4	1,000/300, 7.0'	300	18.0	62	6.0

Summary of Model Simulation Results

Table 2. The summary of results for the 4 different Alternatives

Alt.	Southland Reservoir			STA-5N			
	Percent of time Stage is at or below -3' NAVD	Percent of time Stage is at or below 0' NAVD	Percent of time Stage is at or below 5' NAVD	Extra Outflow Capacity (cfs)	Extra Outflow Capacity start Elevation (inch)	Inflow from Reservoir (cfs)	Percent of time below ground elevation
1	60	95	100	300	6.0	109.1	11.8%
2	54	90	100	200	6.0	109.0	11.2%
3	18	48	86	100	6.0	103.1	3.7%
4	1	6	42	62	6.0	81.0	0.0%

Results Summary

In Table 2, the "Percent of time stage is at or below -3 NAVD" column represents the amount of time the Reservoir was at or below the low-level operating level for the Reservoir (which is -3 NAVD88). The "Percent of time stage is at or below 5' NAVD" column was selected to show the percent of time the reservoir is less than half full (operation of reservoir is from -3 NAVD to 13 NAVD). The "Percent of time stage is at or below 0' NAVD" was selected to show an intermediate water level between -3' NAVD and 5' NAVD.

These results show that moving an additional 300 cfs through STA-5N keeps the STA-5N water levels significantly higher than the Base Run (which is the daily stage from the LOSOM RSMBN model), but moves so much water through the STA that the Reservoir is very low and not utilizing its constructed capacity. As the amount of additional water you can move through STA-5N decreases to 200 cfs, 100 cfs and 62 cfs, it is apparent that the Reservoir is being used more, while the STA still is being maintained at water levels that are more beneficial and closer to the target depth of 18 inches. The following output graphs for the Reservoir and STA-5N illustrate this relationship.

Specific Model Output

Figure 3. Alternative 1 - Southland Reservoir Daily Water Level & Lower Operational Level (-3') 1965-2016 (ft. NAVD88)

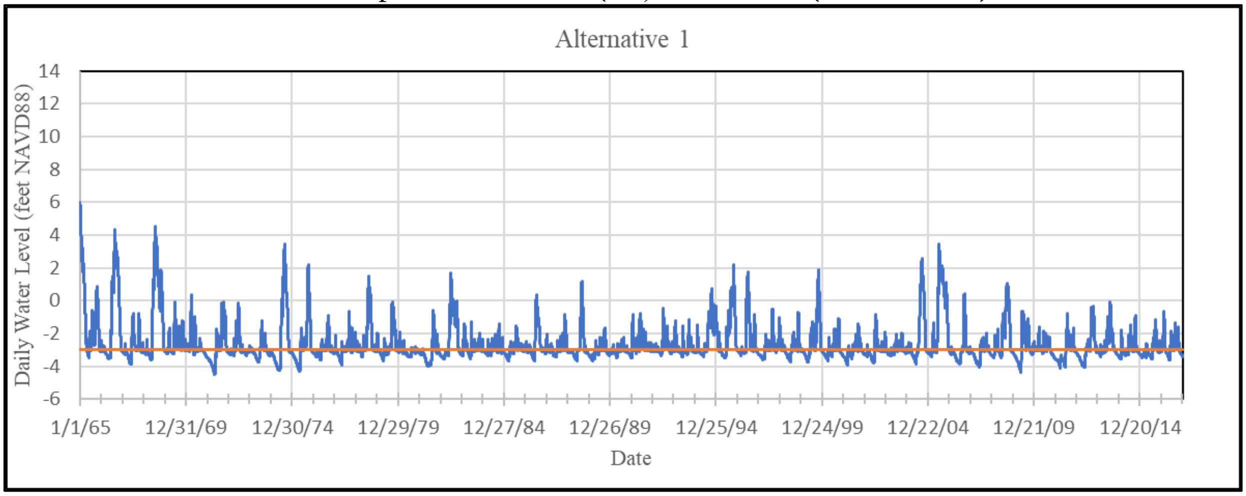
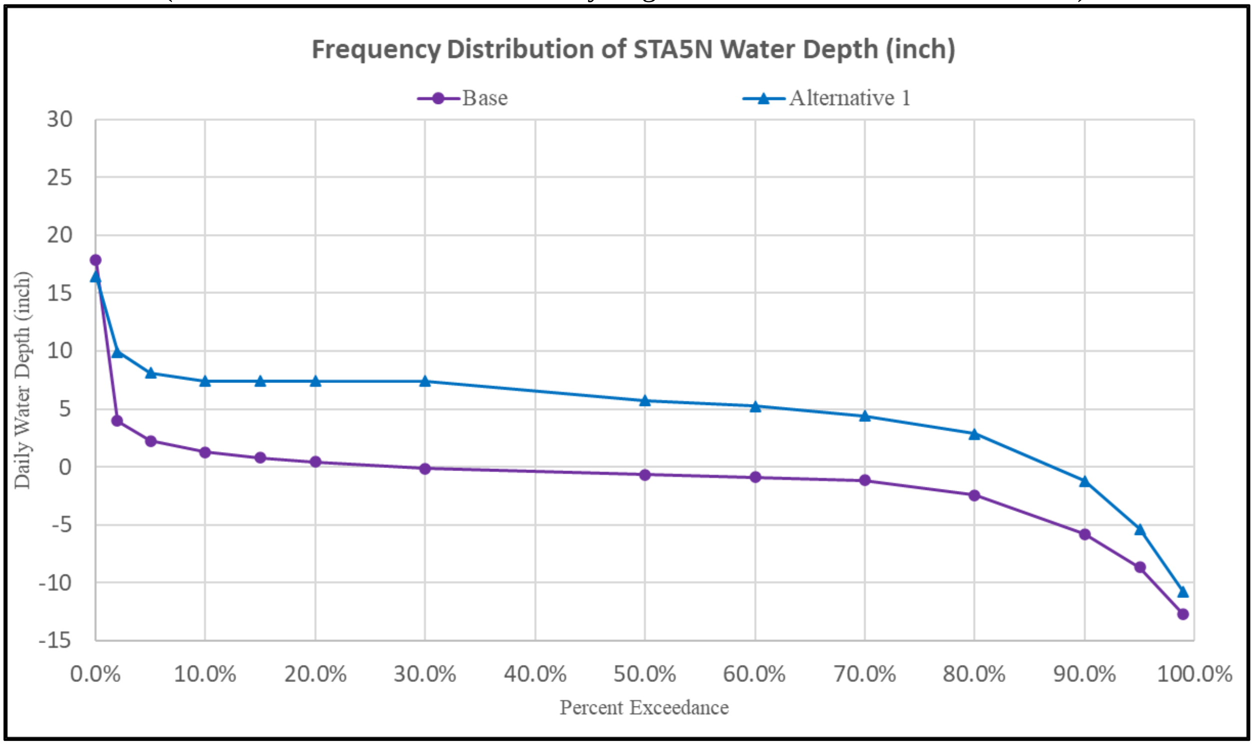


Figure 4. STA-5N Daily Water Depth Frequency Distribution 1965-2016 (inch)
(The Base Run is defined as the daily stage from the LOSOM RSMBN model)



This illustrates that moving an extra 300 cfs through the STA-5N keeps the Reservoir water level very low. The STA-5N water level is better than the Base Run, but it is not meeting the desired conditions of maintaining an elevation of 18 inches.

Figure 5. Alternative 2 - Southland Reservoir Daily Water Level & Lower Operational Level (-3') 1965-2016 (ft. NAVD88)

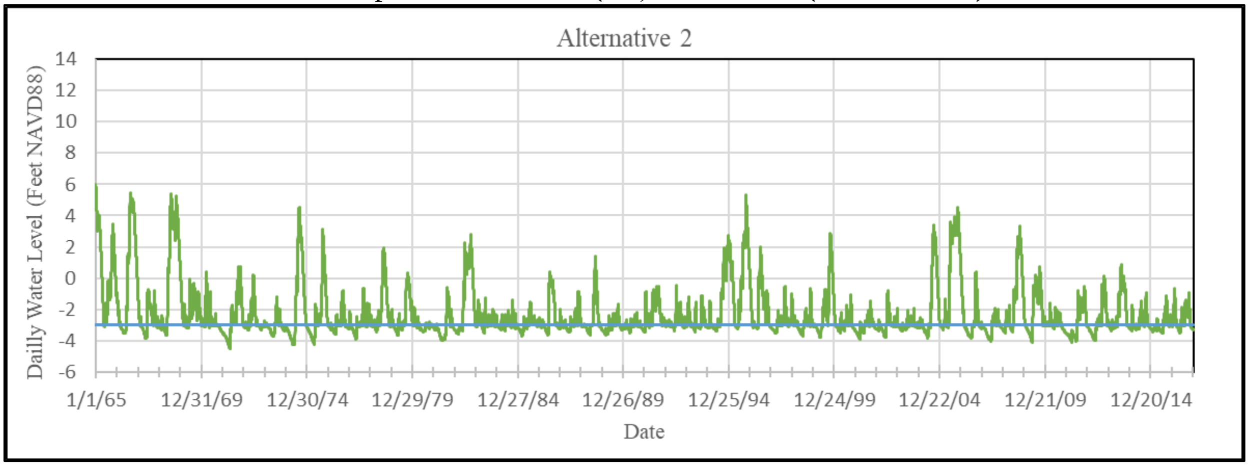
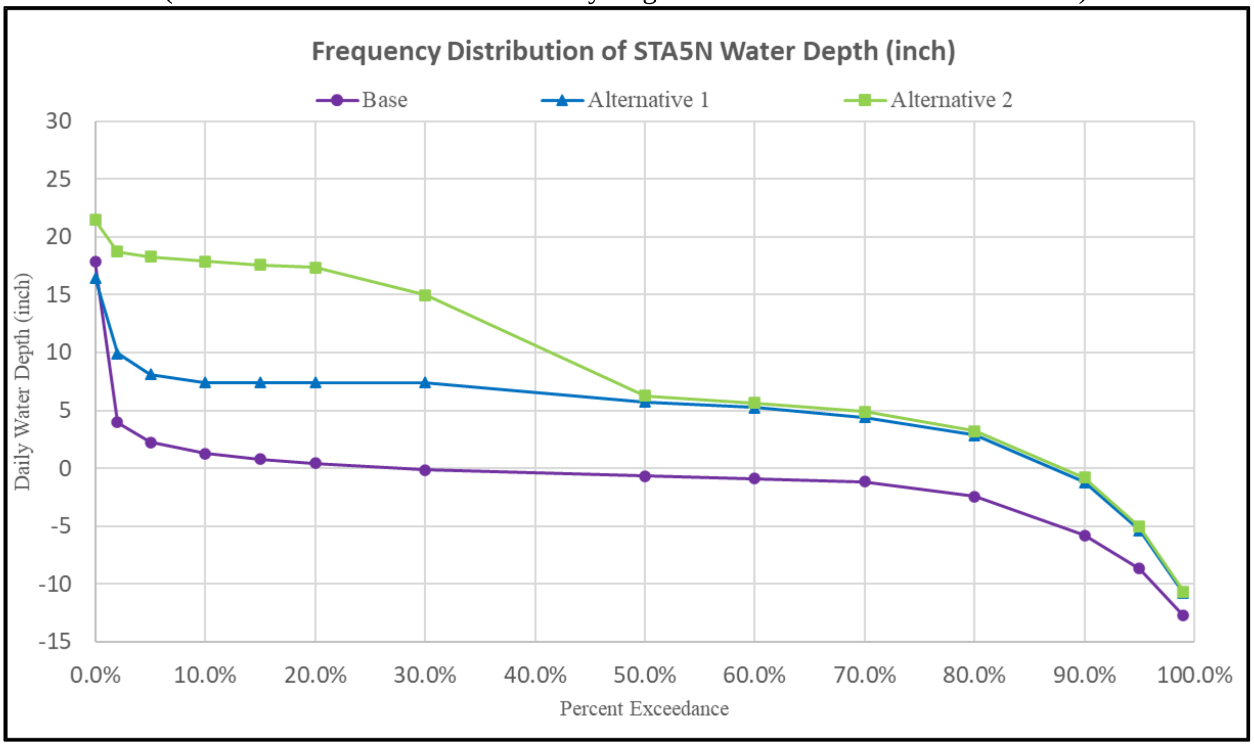


Figure 6. STA-5N Daily Water Depth Frequency Distribution 1965-2016 (inch)
(The Base Run is defined as the daily stage from the LOSOM RSMBN model)



This illustrates that moving an extra 200 cfs through the STA-5N allows a little more use of the Reservoir but the STA-5N water level is still very low and as a result is not meeting the desired conditions of maintaining 18 inches.

Figure 7. Alternative 3 - Southland Reservoir Daily Water Level & Lower Operational Level (-3’) 1965-2016 (ft. NAVD88)

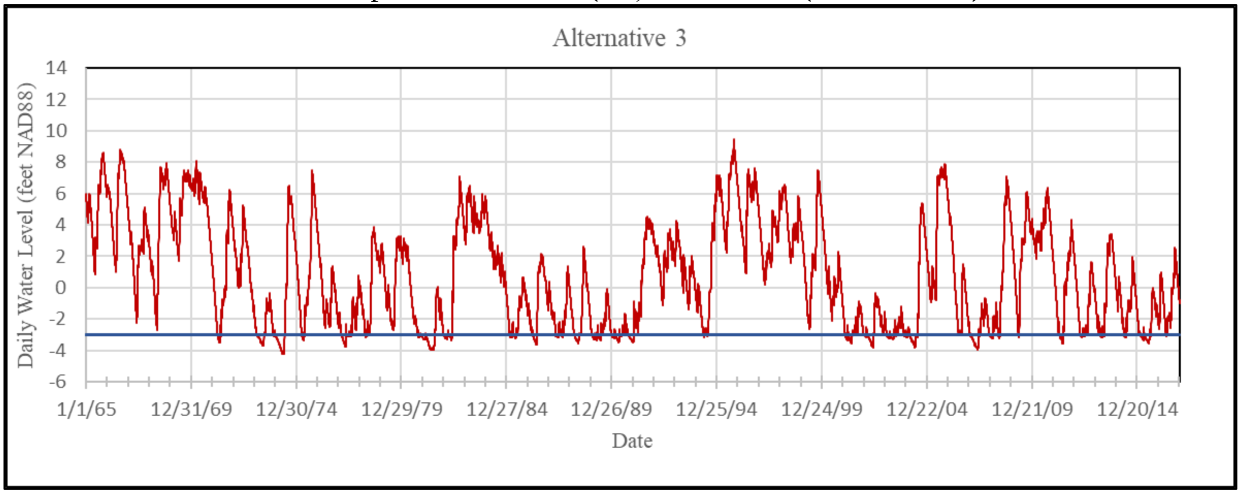
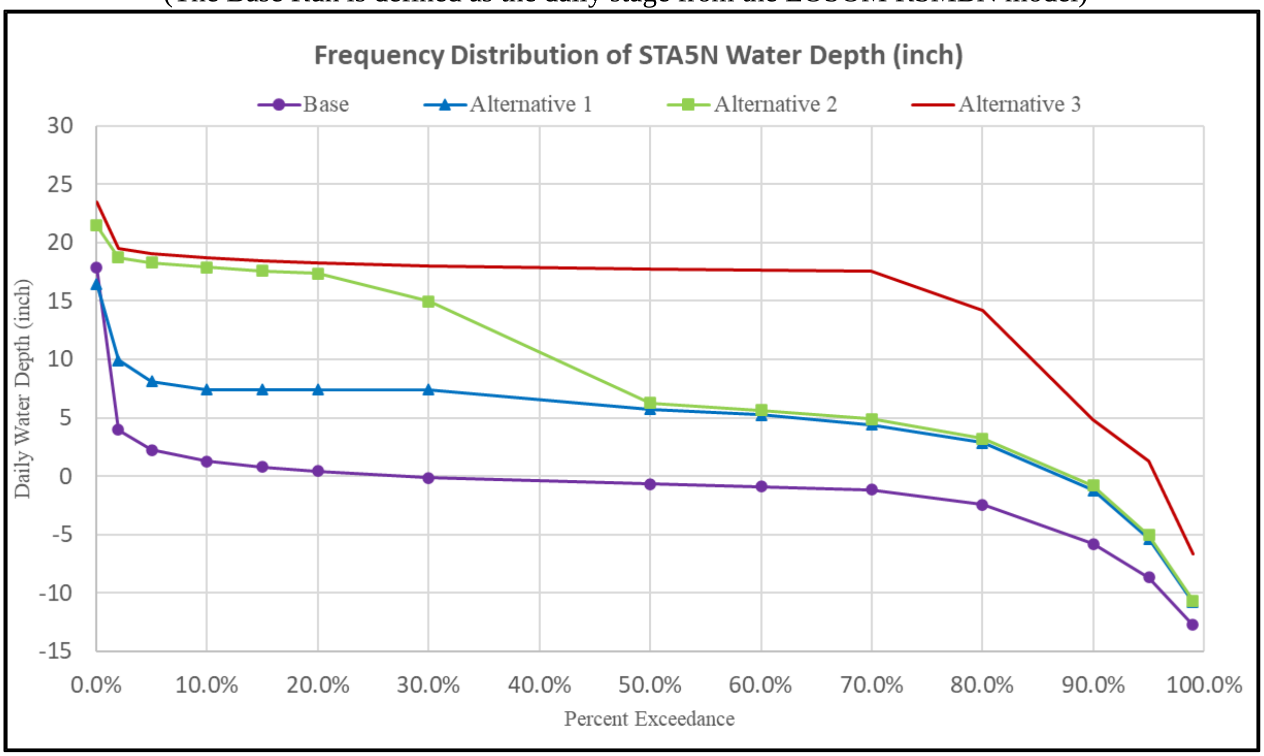


Figure 8. STA-5N Daily Water Depth Frequency Distribution 1965-2016 (inch)

(The Base Run is defined as the daily stage from the LOSOM RSMBN model)



This illustrates that moving an extra 100 cfs through STA-5N allows much more use of the Reservoir and as a result is meeting the target elevation of 18 inches most of the time.

Figure 9. Alternative 4 - Southland Reservoir Daily Water Level &
Lower Operational Level (-3') 1965-2016 (ft. NAVD88)

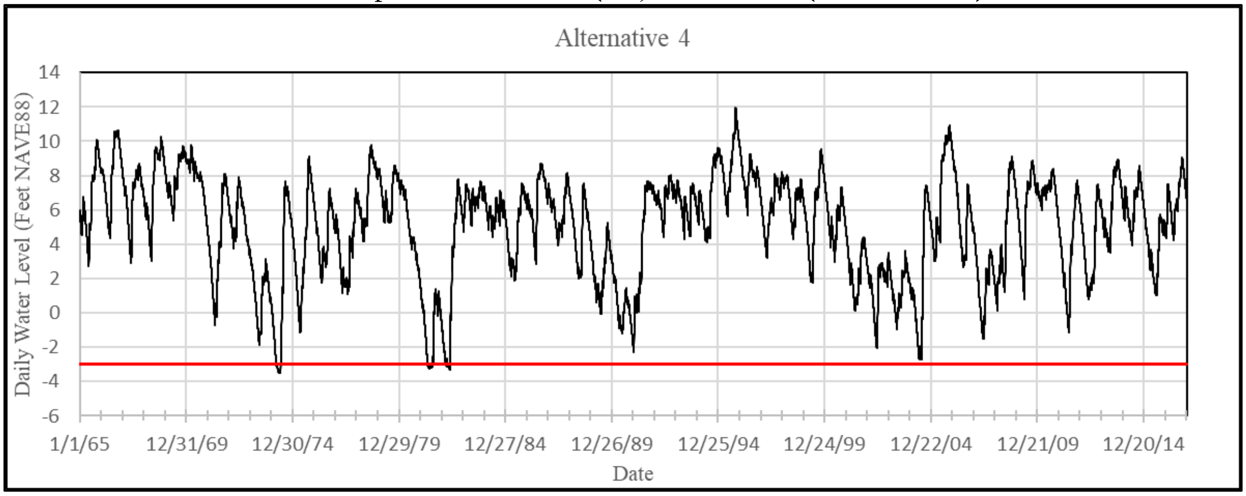
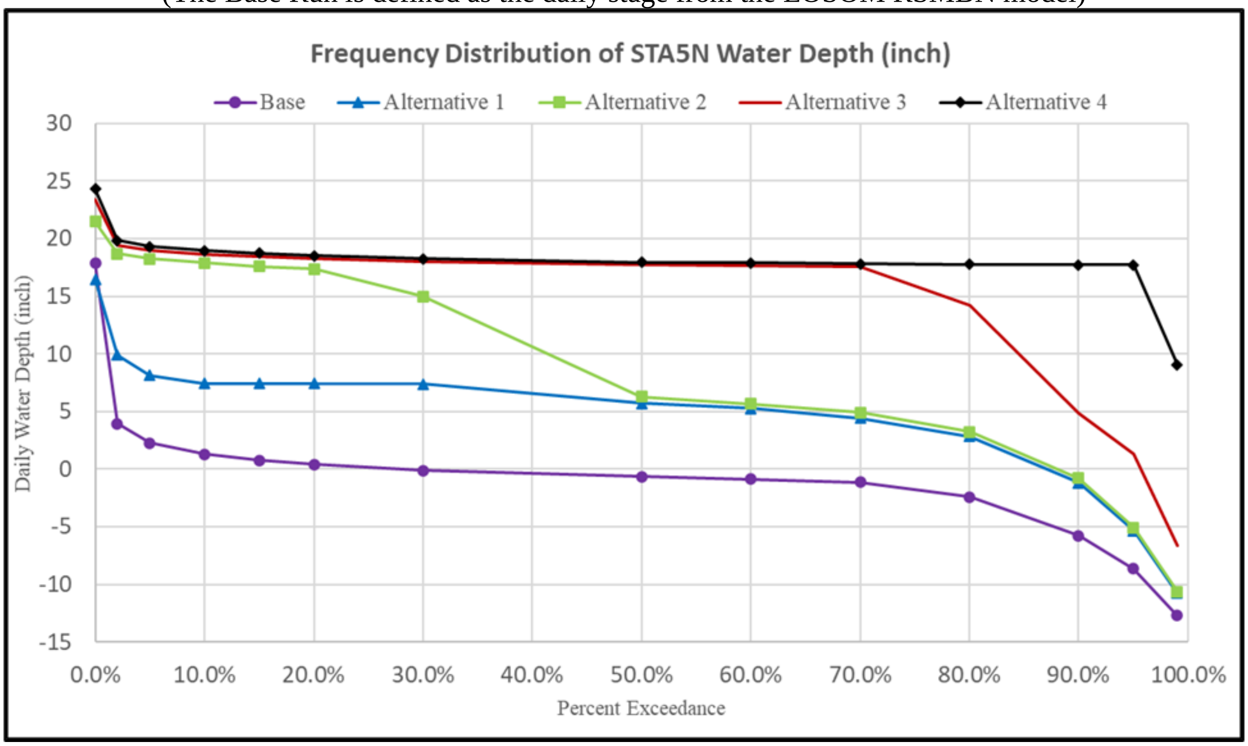


Figure 10. STA-5N Daily Water Depth Frequency Distribution
1965-2016 (inch)
(The Base Run is defined as the daily stage from the LOSOM RSMBN model)



This illustrates that moving an extra 62 cfs through STA-5N allows a significant use of the Reservoir and as a result is meeting the target elevation of 18 inches in the STA nearly all the time.

Figure 11. Southland Reservoir Daily Water Level Frequency Distribution
1965-2016 (ft. NAVD88)

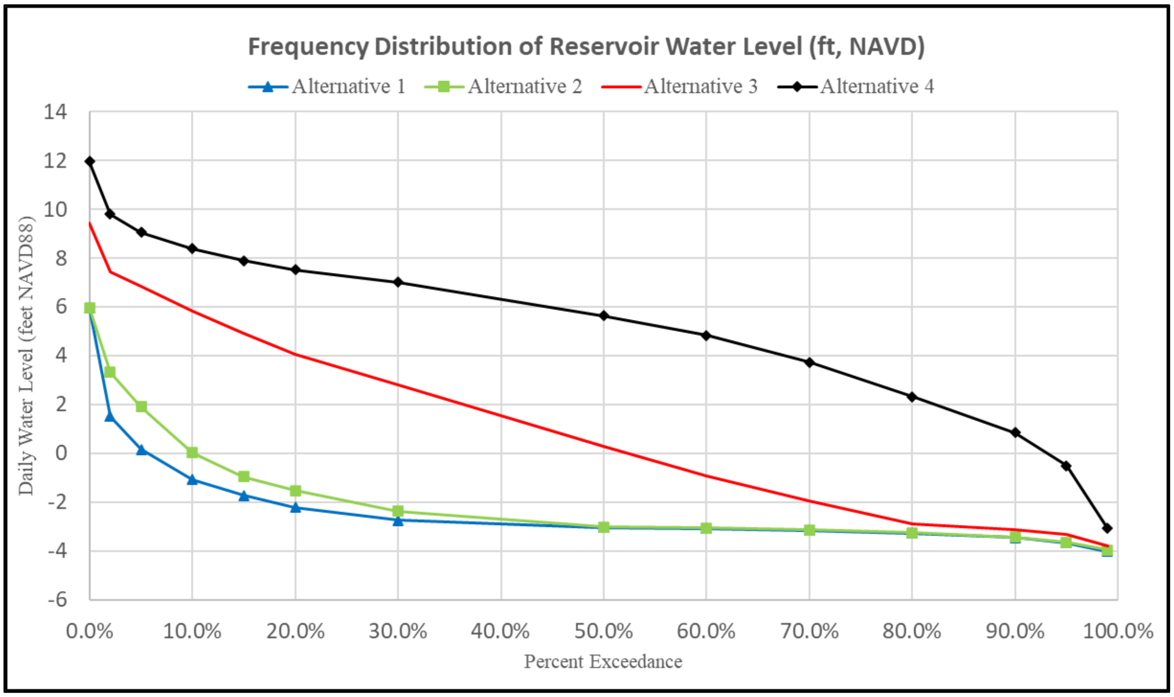
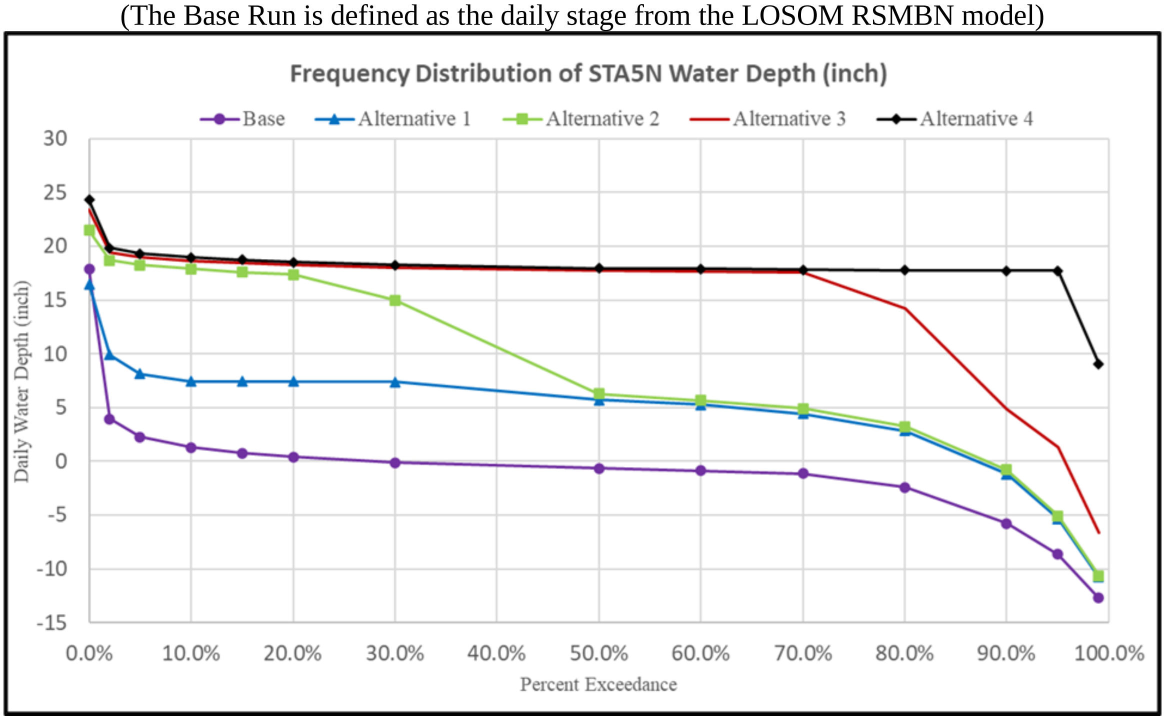


Figure 12. STA-5N Daily Water Depth Frequency Distribution
1965-2016 (inch)
(The Base Run is defined as the daily stage from the LOSOM RSMBN model)



This illustrates the water depth frequency for both the Reservoir and the STA-5N and illustrates that moving an extra 62 cfs through STA-5N allows a significant use of the Reservoir and as a result is the most beneficial to the STA.

Exhibit B

Southland

Preliminary 3D Groundwater Modeling

Aug 1, 2023

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Basis of the 3D Groundwater Model

- The model utilized for the evaluation of the Southland project is based on the steady-state 3D groundwater model developed for the A-2 STA design. *A-2 Stormwater Treatment Area Final Groundwater Modeling Report, 4600003986-WO5R1: Task 3.4.3, Prepared by Collective Water Resources for the South Florida Water Management District & Brown and Caldwell, March 2021.*
- Baseline Model: The A-2 STA "with project" model was utilized as the baseline condition for the Southland model, i.e. the baseline model is the model that assumes that the A-2 STA and A-2 Reservoir are constructed as evaluated in the A-2 STA 3D Groundwater Modeling.
- Southland "with project" Model: takes the baseline model and incorporates the Southland project.
- Steady-state analysis

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Southland 3D Groundwater Model: Assumptions

- **Hydrogeologic model:** Same as the A-2 STA design model with similar permeabilities, but with modification of the layer surfaces based on the boring data collected for the Southland project as provided on 7/4/2023.
- **Model Boundary:** The A-2 STA design model northern boundary coincides with the Southland project boundary. Extended the model boundary 4 miles north of the Southland project (to Bolles Canal) to evaluate impact to the farm land north of the Southland project.
- **Southland Cutoff Wall:** Assumed the same depth and permeability as the cutoff wall for the A-2 Reservoir: depth of 42.6 ft (bottom elevation -34.1 ft-NAVD), width of 3-ft, and permeability of 0.0003 ft/d).

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Southland 3D Groundwater Model: Assumptions (continued)

- **Miami Canal:** Wet season stage (lower end of canal operating range). Profile from A-2 STA modeling, e.g. stage at intersection with A-2 Inflow and Outflow Canal is 9.3 ft NAVD.

- **North New River Canal:** Wet season stage (lower end of canal operating range). Profile from A-2 STA modeling, e.g. stage at intersection with A-2 Inflow and Outflow Canal is 9.8 ft NAVD.

- **Farm Canals:** Assumed farm operations data from fields that were evaluated as a part of the A-2 STA evaluation and applying it to all farm canals in the model domain. The farm canal levels are included in the model at their high range based on values identified in the A-2 STA 3D groundwater modeling (7.7 ft NAVD). The value may be too high in some areas of the model domain. These values will be refined in future phases of the modeling pending data collection and review.

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Southland 3D Groundwater Model: Assumptions (continued)

- **A-2 Inflow and Outflow Canal:** Wet season stage (lower end of canal operating range) based on water surface profile generated from pumping at full capacity at S-623 (A-2 Reservoir inflow pump station) with the Miami Canal and NNR Canal at the wet season condition.
- **A-2 STA:** Stages in cells at maximum depth (4 feet). A-2 STA Canals at similar elevations as A-2 STA cells.
- **A-2 STA Seepage Canal:** Managed at the farm canal level (7.7 ft NAVD).
- **A-2 Reservoir, stage:** full storage level, depth 22.6 feet (Stage varies with ground elevation within the A-2 Reservoir, avg elevation 31.1 ft-NAVD)
- **A-2 Reservoir Seepage Canal:** Managed at the farm canal level (7.7 ft NAVD).

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Southland 3D Groundwater Model: Assumptions (continued)

- **STA 3/4:** High stage from DBHYDRO based on the time period evaluated for the A-2 STA model (11.1 ft NAVD).
- **STA 3/4 Inflow Canal:** High stage from DBHYDRO based on the time period evaluated for the A-2 STA model (14.2 ft NAVD).
- **EAA FEB:** Normal high operating level (4-ft depth).
- **STA 2:** High stage from DBHYDRO based on the time period evaluated for the A-2 STA model (10.6 ft NAVD).
- **Rotenberger WMA:** High stage from DBHYDRO based on the time period evaluated for the A-2 STA model (12.0 ft NAVD).

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Approach

- Initial simulations indicated that seepage management is required to mitigate head differentials outside the project area and to maintain water levels within the Southland reservoir.
- Approximated seepage management using a simplified approach for the preliminary modeling analysis.
  - Evaluated seepage pumping that may be required (based on the assumptions herein) using a fixed water table approach and then added pumping to identify a potential range of required pumping to account for potential head losses.
  - Conducted model simulations to determine the sensitivity of the model results on the hydrogeologic layer in which the conceptualized pumping occurs.

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Scenarios Evaluated (to date)

Scenario*	Below Grade Depth of the Southland Reservoir (ft)	Depth of Water Surface Below Grade in the Southland Reservoir (ft)	Water Surface Elevation in the Southland Reservoir (ft-NAVD)	Comments
3	**15**	**8**	**0.3**	**15 feet excavation depth assumed because this is the threshold for PBC excavation permit.**
4	15	10	-1.7	15 feet excavation depth assumed because this is the threshold for PBC excavation permit.
5	15	12	-3.7	15 feet excavation depth assumed because this is the threshold for PBC excavation permit.
6	15	15	-6.7	15 feet excavation depth assumed because this is the threshold for PBC excavation permit.

Sensitivity runs simulating potential head losses were conducted for scenario 3 only.

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Model Results Minimum Flow Required for Scenarios 3 to 5

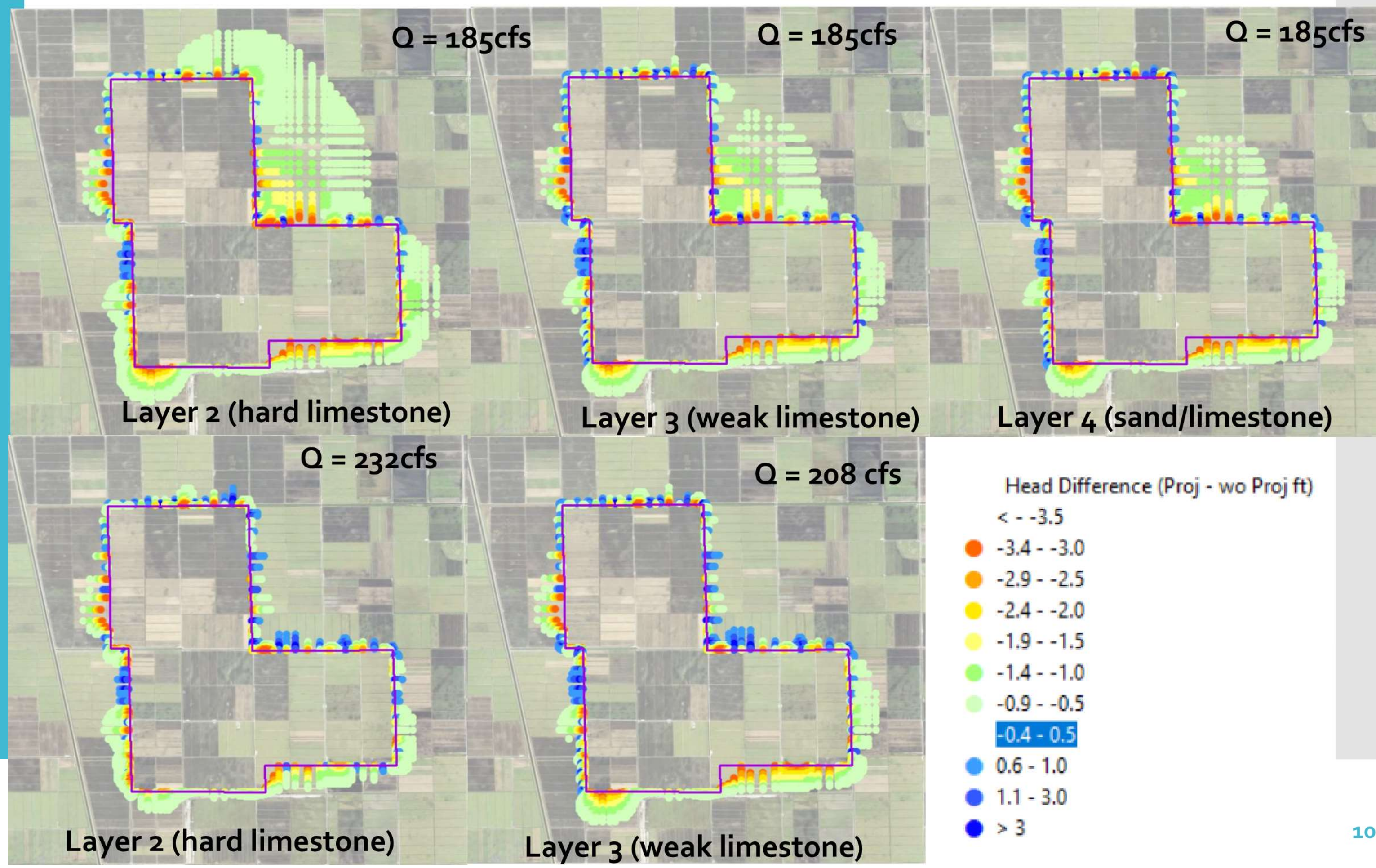
Scenario	Reservoir Water Surface Elevation (ft-NAVD)	Minimum[1] Flow Required to Maintain Water Surface Elevation (cfs)
3	0.3	112
4	-1.7	141
5	-3.7	171
6	-6.7	215

Minimum flow does not account for head losses, i.e., model assumes that water table is fixed at the target elevation around the reservoir.

Sensitivity Tests on Head Losses for Scenario 3

Water Table Difference (With Project – Without Project)

Minimum flow required to maintain the reservoir at 0.3 ft-NAVD (8 feet below ground) = **112 cfs**. But higher flows required are anticipated due to losses depending on where the pumping is injected. Sensitivity analysis shows that up to 232 cfs would be required to maintain the targe water surface elevation in and around the reservoir.



Model Limitations

- Evaluated steady state conditions only.
- Model is subject to hydrogeologic data interpretation and interpolation errors.
- Pending data availability, conduct at least a qualitative model calibration in future phases of the modeling to confirm the results.
- Pumping optimization techniques are conceptual and limited.

Collective WATER RESOURCES

Exhibit C

August 13, 2023

Phillips & Jordan
30115 State Road 52
San Antonio FL, 33576

Attention: Matt Eidson, DBIA, ENV SP
Email: meidson@pandj.com
Phone: 941-705-9558

Subject: **Groundwater Sampling Memorandum**
Southland Water Project
Palm Beach County, Florida
WIRX Project No. 2304002

In accordance with your request and authorization, WIRX Engineering, LLC (WIRX) has sampled and tested the groundwater at the above referenced Project. The purpose of the work described herein was to determine the chloride content within the groundwater at the Project site.

The Project site is located within the Everglades Agricultural Area (EAA) of Palm Beach County, Florida. More specifically, it is centrally located approximately 13 miles south of Lake Okeechobee between the Miami Canal to the west, and US Highway 27 and the North New River Canal to the east. The site is also located adjacent to the north of the Central Everglades Planning Project (CEPP) EAA Storage Reservoir and Treatment Wetland Projects.

WIRX installed nested monitoring wells at four (4) locations (PZ-1 to PZ-4) along the perimeter of the Project. The location of the monitoring wells is depicted on the attached Sheet 1 – Monitoring Well Plan. Three (3) monitoring wells were installed at each location to facilitate performance of permeability tests using falling or constant head permeability test procedures. The wells were installed in selected and isolated soil/rock layers within the upper 50 feet of subsurface profile. In general, the shallow wells designated as "S" were installed to a depth of approximately 15 feet, the intermediate wells designated as "I" were installed to a depth of approximately 30 feet, and the deep wells designated as "D" were installed to a depth of approximately 45 feet. Each well was equipped with a 10-foot long well screen with 0.01-inch slotted screen openings. In the shallow wells ("S"), gravel was installed within the annulus surrounding the screen to a height of approximately 1 foot above the top of the screen. In the deeper intervals ("I" & "D"), a 20/30 gradation silica sand was installed within the annulus surrounding the screen to a height of approximately 1 foot above the top of the screen. A 2-foot thick layer of bentonite chips was placed in the annulus space on top of the filter material. The bentonite seal was followed by filling the borehole with a cement/bentonite grout to the existing ground surface. The wells were completed with surface protection set in a concrete pad and locking well caps. After well installation was completed, each of the wells was developed by repeatedly pumping water in and out until all the sediment was cleared from the bottom of the well.

Groundwater samples were collected from PZ-3 on July 10, 2023 and from PZ-1, PZ-2 and PZ-4 on August 1, 2023. A peristaltic pump and disposable tubing were used to withdraw the groundwater from the screened interval of the well. Purge water was monitored in the field for temperature, pH, conductivity, turbidity and dissolved oxygen (DO) until stabilization occurred in accordance with Florida Department of Environmental Protection Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Subsequently, a groundwater sample was collected from each monitoring well.

Sampling was performed by 40-hour OSHA HAZWOPER trained personnel and samples were collected in general compliance with the Florida Department of Environmental Protection Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Clean latex gloves were worn while collecting each sample, and were changed between sample locations to minimize the risk for cross-contamination of samples. The groundwater samples were placed in laboratory supplied containers, stored in a cooler with ice and transported to Jupiter Environmental Laboratories, Inc., a National Environmental Laboratory Accreditation Conference (NELAC) certified laboratory for analysis of chloride content by Standard Method 4500-CL-E. The laboratory analytical reports, chain of custody forms and groundwater sampling logs are provided in the Appendix. Calibration records for the field measuring equipment are also provided in the Appendix.

Table 1 – Chloride

Sample ID	Sample Date	Chloride Concentration (mg/l)[1]	Specific Conductance (µS/cm)[2]
PZ-1S	August 1, 2023	130	1164
PZ-1I	August 1, 2023	210	1563
~~PZ-1D~~	~~August 1, 2023~~	~~420~~	~~2215~~
PZ-2S	August 1, 2023	76	1271
PZ-2I	August 1, 2023	71	1134
PZ-2D	August 1, 2023	110	1299
PZ-3S	July 10, 2023	82	1072
PZ-3I	July 10, 2023	180	1510
PZ-3D	July 10, 2023	180	1551
PZ-4S	August 1, 2023	97	1071
PZ-4I	August 1, 2023	68	843
PZ-4D	August 1, 2023	70	879

PZ-1D Not within project boundary

1 – Obtained from laboratory test (Standard Method 4500-CL-E)
2 – Obtained in the field using a YSI 556 Multiparameter Instrument

WIRX warrants that the professional services performed and presented in this report are prepared for Phillips & Jordan, and are based upon recognized typical standard of care principles and practices in the discipline of environmental engineering at this place and point in time, for this project site. No other warranties are expressed or implied.