

NORTHERN PALM BEACH COUNTY IMPROVEMENT DISTRICT  
PUBLIC FACILITIES REPORT  
UNIT OF DEVELOPMENT NO. 11 / 11A

**Section 1. Lands in Unit**

Northern Palm Beach County Improvement District (Northern) Unit of Development No. 11/11A encompasses 2,341 acres, more or less, and is located in the City of Palm Beach Gardens. Unit No. 11A which is part of Unit No. 11, encompasses 490 acres, more or less. [Exhibits A](#) and [B](#) show the general location of Unit Nos. 11 and 11A in relation to Northern's boundaries and the northern region of Palm Beach County. Unit No. 11 is bounded on the east by the Florida Turnpike, on the north by PGA Boulevard, on the west by C-18 Canal, and on the south by the Beeline Highway and Northlake Boulevard.

Unit No. 11 lands are located in Section 8, 9, 10, 15, and 16, Township 42 South, Range 42 East. Lands within Unit No. 11 are developed as a Planned Unit Development (PUD) known as The PGA National Resort Community providing a mix of land use categories including residential, recreational, and commercial.

**Section 2. Water Management System**

2.1 General

Stormwater runoff from Unit No. 11/11A flows through a system of grassed swales and culverts to Northern canals and lakes. From the lakes, the stormwater is pumped to a 300-acre marsh retention area. Discharge from the marsh is to the South Florida Water Management District (SFWMD) C-18 Canal via control structures.

2.2 Off-site lands

The off-site lands that drain through Unit No. 11/11A consist of approximately 95 acres of Northlake Boulevard between the Beeline Highway and the Florida Turnpike and PGA Boulevard between the C-18 Canal and the Florida Turnpike.

**Section 3. Northern Facilities**

Lands within Unit No. 11/11A that have been granted to Northern in fee simple are shown on [Exhibits 11\(1\)](#) through [11\(10\)](#). Easements, also shown on the Exhibit, have been provided for other Northern facilities.

Northern’s responsibilities in the Unit include operation, inspection, and maintenance of the facilities. Maintenance includes a biological, chemical and mechanical aquatic weed control program for the lakes, and an exotic plant control program for the created and preserved wetlands.

The service/demand area for the Units is approximately 2,436 acres.

Unit No. 11 lies entirely within the South Florida Water Management District’s (SFWMD’s) C-18 Drainage Basin, which has an allowable discharge rate restriction of 41.6 csm (cubic feet per second per square mile) for the 25-year/3-day storm event.

The PGA National Resort Community water management system is divided into two sub-basins, the developed portion and the marsh retention area. Three pump stations maintain the water surface elevation in the developed basin, by regulating discharge to the marsh retention area. The main pump station (PS-3) includes a duty pump that handles the first inch of runoff from the developed area. For events generating greater runoff amounts, all three pump stations may be used in a predetermined pumping schedule that is based on upstream and downstream water surface elevations. The discharge from the marsh retention area is through three control structures (W-1 through W-3). An operable gate on the W-2 structure allows for pre-storm operation to lower stages in the marsh retention area before an anticipated storm of 3” or more rainfall.

The SFWMD permit (#50-00617-S) specifies the minimum building pad elevation and minimum road crown elevation for the developed area at 19.0’ NGVD and 17.0’ NGVD, respectively. These elevations were set based on drainage calculations submitted for peak stages for the 100-year/3-day storm event (building pad) and the 10-year/1-day storm event (road crown). Design stages and discharges are presented in Table No. 11.

<b>TABLE NO. 11: DESIGN INFORMATION</b>		
<b>Basin</b>	<b>Development Area</b>	<b>Marsh Retention Area</b>
10-Yr/1-Day Peak Stage	17.2’ NGVD	-----
25-Yr/3-Day Peak Stage	17.7’ NGVD	18.7’ NGVD
25-Yr/3-Day Peak Discharge	234 CFS	342 CFS
100-Yr/3-Day Peak Stage	18.8’ NGVD	18.8’ NGVD

There are five surface water quality sampling stations in Unit No. 11/11A. The locations of the stations are shown in [Exhibit 11\(1\)](#) through [11\(10\)](#). All records are maintained at Northern’s office. The parameters are as follows:

Quarterly Parameters – Surface Water (20 samples per year):

- Alkalinity (total and phenyl)
- Ammonia (total and unionized)

Chlorides  
Coliform Bacteria (total and fecal)  
Conductivity, specific  
Copper  
Hardness  
Lead  
Nitrate  
Nitrite  
Oil & Grease  
Phosphate (ortho and total)  
Oxygen, Biochemical Demand  
pH (laboratory or field)  
Potassium  
Suspended Solids, total  
Total Kjeldahl Nitrogen  
Total Organic Carbon  
Turbidity (NTU)  
Zinc

Annual Parameters (5 samples per year):

Pesticide Scan  
Herbicide Scan

#### **Section 4. Five – Year Improvement Plan**

1. Planned improvements anticipated will be the replacement of the outfall culverts from the Unit's impoundment into the C-18 Canal. – Cost \$150,000.00
2. Replacement or refurbishment of the north and south pump stations and the milling and repaving of Tournament Boulevard. – Cost \$1,500,000.00
3. On-going maintenance and reestablishment of roadway swales for roadways maintained by the District.
4. Milling and resurfacing of Coventry Lane.
5. Ongoing dredging of existing lakes.

#### **Section 5. Ten – Year Replacement Plan**

There are no improvements anticipated within this Unit during the next ten years.