

# Calculations

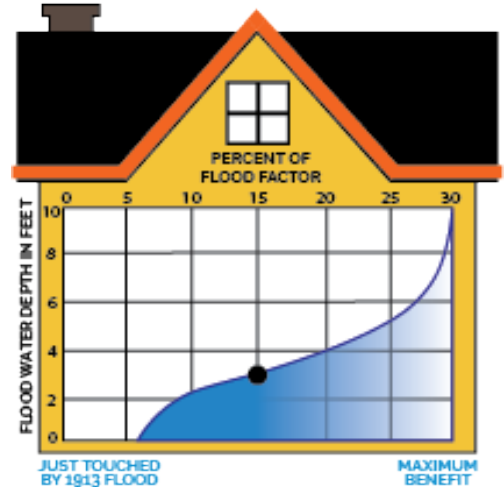
7<sup>th</sup> Readjustment of the Appraisal of Benefits



**THE MIAMI  
CONSERVANCY  
DISTRICT**

## DETERMINING BENEFITS

- Individual properties that flooded in 1913 and are now protected by the Miami Conservancy District receive a benefit from the system.
- Benefits to approximately 47,000 individual properties are based on depth of 1913 flooding.
- The current value of the property, as determined by the County Auditor, is used to compute the benefit to the property.
- The methodology was developed in 1917 and has been used for more than 100 years.



### Full Vs. Partial Protection

- If your property is protected by dams, storage basins, and levees, you are **fully protected**.
- If your property is protected by dams and storage basins only, you are **partially protected**, and receive less benefit.
- The **Flood Factor** used in the Benefit computation ranges from 3% to 30% depending on full or partial protection as shown in the tables below:

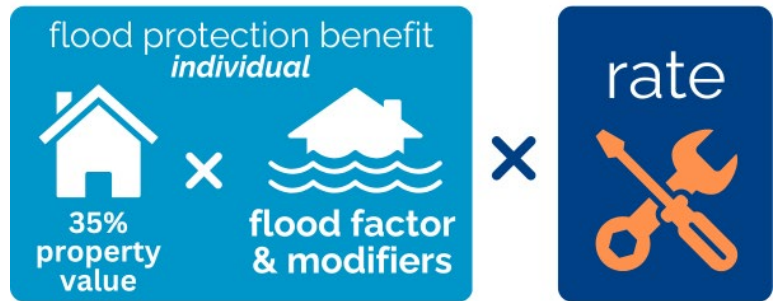
<i>Properties protected by the dams, storage basins, and levees</i>	
Flood Depth in 1913 (ft.)	Flood Factor
10 feet or more	30
7 – 9.99	28.5
6 - 6.99	27
5 – 5.99	24
4 – 4.99	19.5
3 – 3.99	15
2 – 2.99	9
0.5 – 1.99	7.5
Greater than 0 – 0.49	6

<i>Properties protected by dams and storage basins only</i>	
Flood Depth in 1913 (ft.)	Flood Factor
Greater than 0	3

<i>Properties with reduced risk of flooding</i>
<b>Modifiers</b>
Wet percentage of land area
Tall building – over four stories
Multiple building
Special computations

## CALCULATING ASSESSMENTS

Properties that benefit from the protection of the Miami Conservancy District integrated flood protection system pay an annual maintenance assessment used for the ongoing operation and maintenance of the flood protection system and a capital assessment used for the rehab and repair of the flood protection system.



The **assessment** is calculated by multiplying a **benefit** and **rate**.

The **benefit** represents the enhanced value of the property resulting from flood protection and is computed using the following flood factors:

- Land and building tax values of the property provided by the county auditor.
- A flood percentage ranging from 3 to 30%, based on the depth of flooding at the property during the 1913 flood.
- Other applicable modifiers such as the percent of property that was flooded, the location of structures, and buildings with multiple stories.
- Whether the property is fully protected or partially protected.

The **rate** is assigned annually by the Miami Conservancy District Board of Directors and is subject to approval by the Conservancy Court.

The **proposed maintenance assessment rate is 2.78%** (beginning 2025). If approved, **the estimated capital assessment rate is projected to be at or under 1%** (beginning 2025).

*Please see the next page for example calculations.*

## EXAMPLE CALCULATIONS

### EXAMPLE 1

Property 1 was flooded in 1913 and now receives risk reduction by the dams, storage basins, levees, and channels. One hundred percent of the land was flooded. The following information about the property is used in the **Benefit** computation:

- Property Tax Value (Land Value \$25K + Building Value \$75K) = \$100,000
- 1913 Flood Depth 3 feet is a Flood Factor of 15% (full protection)
- Other modifiers None (Since 100% of the land was flooded)

**Benefit** = Property Tax Value x Flood Percentage (\$100,000 x 15% = **\$15,000**)

**Annual Maintenance Assessment** = Benefit x Rate (\$15,000 x 2.78% = **\$417.00**)

**Annual Capital Assessment** = Benefit x Rate (\$15,000 x 1% = **\$150**)

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### EXAMPLE 2

Property 2 was flooded in 1913 and now receives risk reduction due to the action of the dams and storage basins. Only 40 percent of the land was flooded, and the current building location is within the flooded area. The following information about the property is used in the **Benefit** computation:

- Property Tax Value (Land Value \$25K + Building Value \$75K) = \$100,000
- Partial Protection Flood Factor of 3%
- Other modifiers 40% of land area flooded

**Benefit** = Property Tax Value x Flood Percentage x Modifier [(\$25,000 x 40%) + (\$100,000)] x 3% = **\$3,300**

**Annual Maintenance Assessment** = Benefit x Rate (\$3,300 x 2.78% = **\$91.74**)

**Annual Capital Assessment** = Benefit x Rate (\$3,800 x 1% = **\$33**)

Because only 40% of the land area was flooded, a 40% modifier was applied to the Land Tax Value.

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### EXAMPLE 3

The same property as demonstrated in Example 2 **except the building is not located within the flooded area**. The following information about the property is used in the **Benefit** computation:

- Property Tax Value (Land Value \$25K + Building Value \$75K) = \$100,000
- Partial Protection Flood Factor of 3%
- Other modifiers 40% of land area flooded

**Benefit** = Land Tax Value x Flood Percentage x Modifier (\$25,000 x 3% x 40%) = **\$300**

**Annual Maintenance Assessment** = Benefit x Rate (\$300 x 2.78% = **\$8.34**)

**Annual Capital Assessment** = Benefit x Rate (\$300 x 1% = **\$3**)

Because only 40% of the land area was flooded, a 40% modifier was applied to the Land Tax Value. The Building Tax Value was not included in the computation because the building is not located within the flooded area.