

GLADES COUNTY CALOOSAHATCHEE RIVER & ESTUARY
TOTAL ESTIMATED TOTAL NITROGEN (TN) REMOVAL
SEPTIC TANK ABANDONMENT
APPROXIMATELY 86.5 ACRES

Results based on:

- 200 lots to be served
- Average removal of 20% TN in septic tank
- Average Daily Flow of 150 gpd per lot
- Estimate TN influent concentration of 40 mg/l

$$0.00015 \text{ MGD} \times 40 \text{ mg/l TN} \times 8.34 \frac{\text{lbs/MG}}{\text{mg/l}} = 0.05 \text{ lbs/D}$$

$$0.05 \text{ lbs/D TN} \times 0.80 (\% \text{ remains}) = 0.04 \text{ lbs/D TN additional}$$

$$0.04 \text{ lbs/D} \times 200 \text{ lots} = 8.0 \text{ lbs/D}$$

$$\begin{aligned} 8.0 \text{ lbs/D} \times 200 &= 1,600 \text{ lbs/yr TN removed} \\ &= 0.8 \text{ tons/yr TN removed} \end{aligned}$$

GLADES COUNTY CALOOSAHATCHEE RIVER & ESTUARY
TOTAL ESTIMATED TOTAL PHOSPHOROUS (TP) REMOVAL
SEPTIC TANK ABANDONMENT
APPROXIMATELY 86.5 ACRES

Results based on:

- 200 lots to be served (entire Phase 5 area)
- Average removal of 15% TP in septic tank
- Average Daily Flow of 150 gpd per lot
- Estimate TP influent concentration of 15 mg/l

$$0.00015 \text{ MGD} \times 15 \text{ mg/l TP} \times 8.34 \frac{\text{lbs/MG}}{\text{mg/l}} = 0.019 \text{ lbs/D}$$

$$0.019 \text{ lbs/D TN} \times 0.85 (\% \text{ remains}) = 0.016 \text{ lbs/D TP additional}$$

$$0.016 \text{ lbs/D} \times 200 \text{ lots} = 3.20 \text{ lbs/D}$$

$$\begin{aligned} 3.20 \text{ lbs/D} \times 365 &= 1,168 \text{ lbs/yr TP removed} \\ &= 0.58 \text{ tons/yr TP removed} \end{aligned}$$

WASHINGTON PARK
TOTAL ESTIMATED TOTAL NITROGEN (TN) REMOVAL
SEPTIC TANK ABANDONMENT
APPROXIMATELY 60 ACRES

Results based on:

- 315 lots to be served
- Average removal of 20% TN in septic tank
- Average Daily Flow of 150 gpd per lot
- Estimate TN influent concentration of 40 mg/l

$$0.00015 \text{ MGD} \times 40 \text{ mg/l TN} \times 8.34 \frac{\text{lbs/MG}}{\text{mg/l}} = 0.05 \text{ lbs/D}$$

$$0.05 \text{ lbs/D TN} \times 0.80 (\% \text{ remains}) = 0.04 \text{ lbs/D TN additional}$$

$$0.04 \text{ lbs/D} \times 315 \text{ lots} = 12.6 \text{ lbs/D}$$

$$\begin{aligned} 12.6 \text{ lbs/D} \times 365 &= 4,599 \text{ lbs/yr TN removed} \\ &= 2.3 \text{ tons/yr TN removed} \end{aligned}$$

WASHINGTON PARK
TOTAL ESTIMATED TOTAL PHOSPHOROUS (TP) REMOVAL
SEPTIC TANK ABANDONMENT
APPROXIMATELY 60 ACRES

Results based on:

- 315 lots to be served
- Average removal of 15% TP in septic tank
- Average Daily Flow of 150 gpd per lot
- Estimate TP influent concentration of 15 mg/l

$$0.00015 \text{ MGD} \times 15 \text{ mg/l TP} \times 8.34 \frac{\text{lbs/MG}}{\text{mg/l}} = 0.019 \text{ lbs/D}$$

$$0.019 \text{ lbs/D TN} \times 0.85 (\% \text{ remains}) = 0.016 \text{ lbs/D TP additional}$$

$$0.016 \text{ lbs/D} \times 315 \text{ lots} = 5.04 \text{ lbs/D}$$

$$\begin{aligned} 5.04 \text{ lbs/D} \times 365 &= 1,840 \text{ lbs/yr TP removed} \\ &= 0.92 \text{ tons/yr TP removed} \end{aligned}$$