## Costs associated with work on Butler Refuge 2009-2010 C. Muise (IBA) and D. Mixon (GA DNR)

#### Cost for one water control structure (with an average 40 foot bulkhead) installed:

Pipe	\$2,300.00
(2) Flap gates	3,956.00
Lumber	3,240.00
Stainless Cable	285.00
Fabric	75.00
Hardware	100.00
Diesel Fuel (2 days)	220.00
-	
Total	\$10,176.00

\*Total man-hours involved in installing a water control structure will range between 40 and 100 man-hours depending on variables such as location and logistics, hardness of substrate where you are driving pilings, and equipment issues.

### Purchases related to work on Butler Refuge:

(12) 40 foot long, 36 inch diameter HDPE pipe:\$27,600.00	purchased on 3/8/2010
(14) 36 inch Aluminum Flap Gates:\$28,692.00	purchased on 10/1/2010
Bulk Purchase of treated lumber:\$27,000.00	purchased on 6/5/2009
Fabric (400ft roll): \$370.00	purchased as needed.
Stainless Cable (1,000ft spool): \$1,350.00	purchased as needed.

### **Projects Completed on Butler Refuge**

Replaced one water control structure	\$10,176.00
Excavator Fuel (\$110/day)@18 days of work on center dike	\$1,980.00
Dozer work and mowing (Fuel Cost \$50/day * 16 days)	\$800.00

# Required materials have already been purchased (see above) and the following activities are planned for the summer of 2011 on the Butler Refuge:

Finish rebuilding center dike on the South Refuge (15 days)	\$1,650.00
Rebuild dike at Dairy Barn (8 days)	\$880.00
Install 2nd water control structure on Butler Refuge.	\$10,176.00

## Cost of projects completed on the Butler Refuge since June 2010: \$12,956.00 Cost of projects planned on the Butler Refuge Summer 2011: \$12,706.00

We purchase items in bulk so we will have materials on hand when needed. The funds provided by GOS were matched with a Federal Grant and we were able to quadruple the money that was donated. Our ability to do this made the bulk purchase of the pipes and flap gates possible.