

Alberta Conservation Association (ACA)

Date: 2014-2015

Project Name: Enhanced Fish Stocking Project

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Project Leader: Diana Rung

Primary ACA staff on project:

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Partnerships

- Access Pipeline
- Agrium Redwater
- Aquality Environmental
- Aux Sable Energy
- City of Fort Saskatchewan
- Complete Crossings
- DOW Agro Sciences
- Lacombe County

Key Findings

- The Enhanced Fish Stocking project provided anglers opportunities to catch and harvest rainbow trout in regions of Alberta where angling opportunities are limited.
- We stocked 61 waterbodies with 115,150 rainbow trout.
- For the first time, we contracted the Government of Alberta to participate in fish stockings. We anticipate that the provincial fish hatcheries will continue to supply fish for these ponds and expand their role in coming years.
- We installed signage at 10 waterbodies.
- ACA has stocked over two million rainbow trout into various waterbodies since 1998.
- We filled a waterbody to full supply level by pumping water from a nearby creek.

Introduction

Alberta Conservation Association (ACA) assumed responsibility for the Enhanced Fish Stocking (EFS) project in 1998. The primary objective of the project is to provide Albertans with increased recreational angling opportunities, particularly in areas of the province where such fishing opportunities do not otherwise exist. Under the EFS project, we stock catchable-sized (i.e., 20 cm minimum total length) rainbow trout into ponds to create put-and-take fisheries where anglers are allowed to harvest up to five fish per day. To prevent interaction with native fish stocks, trout stocking occurs in the White Zone of Alberta (settled area of the province) only

and in waterbodies that frequently winterkill; these waterbodies typically require less than 4,000 rainbow trout in a single stocking. Most ACA stocked lakes are close to municipalities, making them very popular family destinations.

Methods

Rainbow trout stockings were completed through 10 contracts: nine with private growers and one with the Government of Alberta. For private growers, we sent out contracts for tender a year and a half before stocking dates to give these growers the opportunity to grow the rainbow trout to the required 20 cm minimum size. The one stocking contract with the government was negotiated a year before stocking.

Most stockings occurred between mid-April and the May long weekend. We monitored the private grower contracts closely to ensure that the appropriate number and size of rainbow trout were stocked in the designated waterbodies within a set time frame. Once growers were ready to transport the rainbow trout, a stocking date was arranged with a load-out monitor and a lake contact. The load-out monitor travelled to the grower's operation to inventory the rainbow trout being shipped as well as to measure a random subsample (30 to 100 fish) to confirm that fish were of adequate size. We enforced a penalty system to deter growers from stocking under-sized fish. The load-out monitor also assessed overall well-being of the fish by checking condition factor (plumpness) and obvious signs of disease and deformity. Once the correct number of fish was loaded into transport containers, the load-out monitor and grower signed a form documenting the number and size of fish. At the receiving waterbody, a lake contact monitored the stocking process to determine if there were stocking or transport-related mortalities. Rainbow trout stockings contracted to the government did not require monitoring and were completed by government staff. Due to low water level, which occurs biennially at Mirror Reservoir, and to allow for trout stocking, we filled this reservoir to full supply level by pumping water from a nearby creek. This work was made possible by the donation of materials and labour from a site partner. At 10 waterbodies, we installed signage that displayed ACA's logo as well as those of contributing partners.

Results

In 2014/15, we stocked a total of 61 waterbodies with 115,150 rainbow trout (20 cm). Two private growers supplied rainbow trout for nine contracts, and the provincial government supplied rainbow trout for one contract. Approximately 60% of the stockings were completed during the first stocking prior to the May long weekend; the remainder were completed as part of the June and September stockings. The provincial government fish hatchery supplied and stocked 14,200 fish into six ponds. This marks the beginning of a potential long-term relationship with provincial fish hatcheries; we anticipate they will continue to supply fish for these ponds and expand their role in coming years.

Since 1998, when ACA assumed responsibility for the EFS project, we have stocked over two million rainbow trout in 1,455 stocking events (Table 1). The number of waterbodies stocked has varied across years, ranging from 59 in 2011 to 81 in 1998.

We installed ACA signage at 10 waterbodies (Table 2) to identify the waterbody as an ACA stocked site and to identify contributing partners.

Table 1. Rainbow trout stockings for the Enhanced Fish Stocking project from 1998 to 2014.

Year	Number of waterbodies	Number of stockings	Number of rainbow trout
1998	81	100	144,000
1999	74	93	132,650
2000	68	86	131,300
2001	71	85	131,300
2002	67	84	132,100
2003	68	84	131,300
2004	67	85	131,300
2005	66	78	122,100
2006	64	85	131,100
2007	64	87	131,100
2008	60	86	131,100
2009	61	86	131,100
2010	60	83	131,100
2011	59	84	131,100
2012	61	86	129,100
2013	60	84	120,900
2014	61	79	115,150
Total		1,455	2,207,800
Average	66	86	129,870

Table 2. Waterbodies where Enhanced Fish Stocking project signs were installed in 2014.

Waterbody
Daysland Pond
Gold Springs Park
Granum Pond
Innisfree Trout Pond
McQuillan Reservoir
Oyen Concrete Plant Pond
Pleasure Island Fish Pond
Stirling Fish Pond
Telegraph Park Pond
Two Hills Pond

Conclusions

Our EFS project provides anglers with increased opportunity to catch and harvest rainbow trout in regions of Alberta where angling opportunities do not otherwise exist. In 2014/15, private growers and the Government of Alberta raised and delivered the rainbow trout to designated waterbodies. This marks the beginning of a potential long-term relationship with provincial fish hatcheries; we anticipate they will continue to supply fish for these ponds and expand their role in coming years.

Communications

- A complete list of rainbow trout stockings is posted on our website and is updated annually.

Literature Cited

N/A

Photos



Enhanced Fish Stocking sign installed at Daysland Pond in 2014/15. Photo: Kris Kendell



Trout stocking at Waskasoo Pond. Photo: Diana Rung



Filling Mirror Reservoir to full supply level. Photo: Diana Rung