

Economic Impact of Increased Fishing access in Wyoming

By Brian Ramaeker



Growing up in Wyoming has provided me with a multitude of activities through the years. From fishing and hunting to skiing and hiking, I can honestly say that I have never been bored in the cowboy state. I can thank my legislators past and present for allotting 4,944 lake acres and 107 stream miles through the Walk in Fishing Access Program which compensates land owners for giving fishermen access to their surface water (Private lands Public wildlife annual report 2011). Through contingent valuation surveys and some basic economic modeling, I will show that there are grounds to expand the Walk in Fishing Access Program resulting in increased benefit to consumers of \$20,237,558.36 as well as an increase in producer surplus to land owners for increasing the amount of fishable waters for Wyoming anglers. I will also discuss the idea that increasing public access does not lead to environmental degradation and poor fishing quality.

Abstract

- $Q_{fd} = Q_{fd} (P_{bo} + P_f + P_{ba} + P_{priv} + P_{trans} + H + S)$

Q_{fd} = Quantity of fishing Days (as a function of the other variables)

P_{bo} = Price of the boat

P_f = Price of food and lodging

P_{ba} = Price of bait and other fishing related tackle

P_{priv} = Price of access to a particular fishing area

P_{trans} = Price of transport/travel

H = quality of the fishing experience for an individual

S = substitute fishing sites (includes distance and quality of substitute sites)

Basic Model For Outdoor Recreation

Demand Non-Resident



What the market looks like

- Performed through asking consumers directly about their willingness to pay through survey techniques.
- Describe a hypothetical situation, therefore drawing conclusions without actually performing the change.
- Survey had 3 CV Questions:
 1. How much more would you pay for the trip given current conditions
 2. Would you be willing to pay more for doubling the chance of catching a large fish
 3. Would you be willing to pay more for a specific increase in trout populations.

Contingent Valuation

- In 1985 Montana's Supreme Court made a decision on stream access in the state.
- With the change in stream access laws, the demand curve in Montana shifted right as substitute sites became less attractive.
- Non-resident fishing licenses increased 15% in ten years (1985-1995)

Access laws affect on the Demand Function

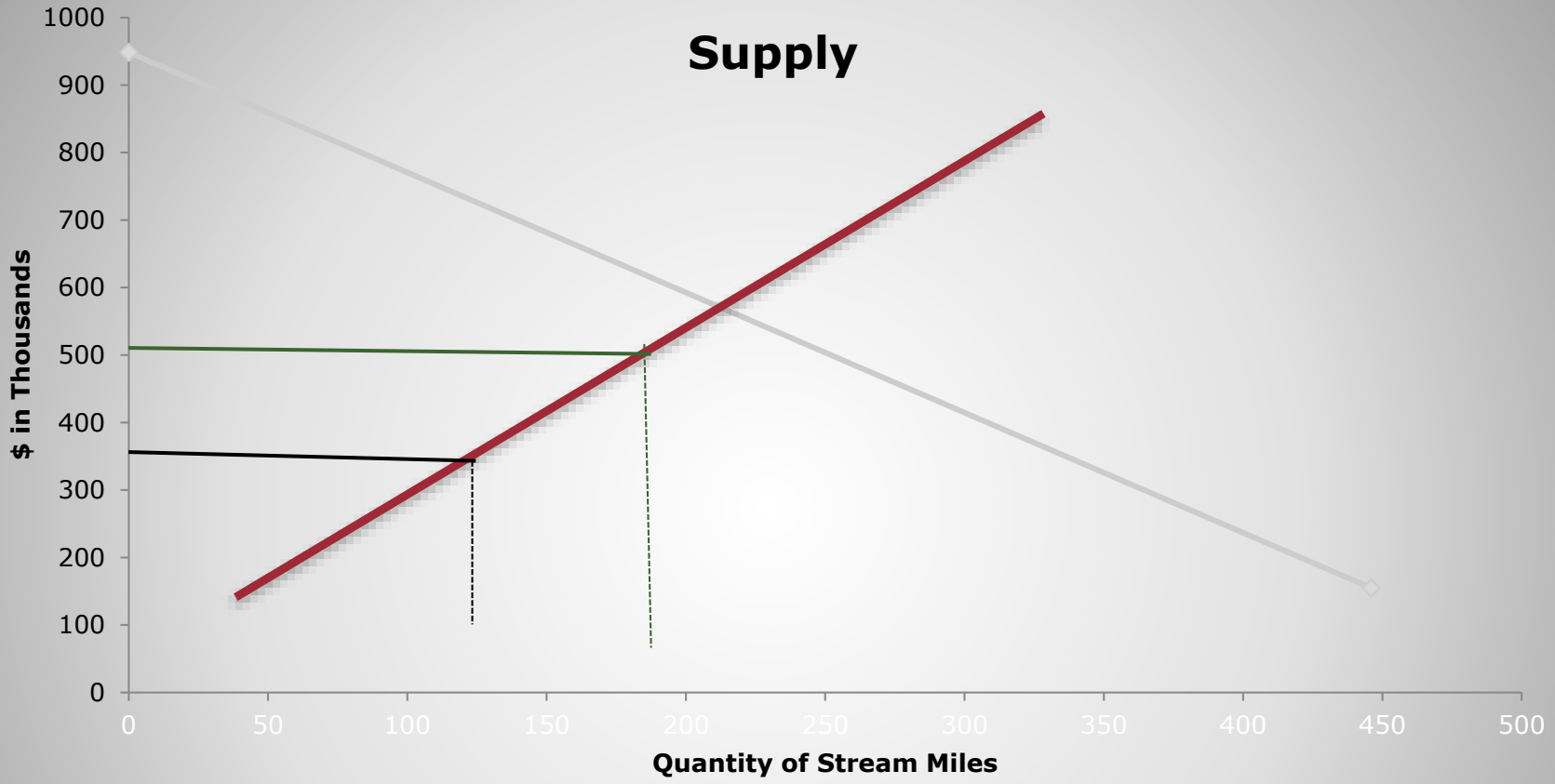
Demand of Non-Residents With Improved Access



- Assuming Wyoming sees the same response in demand as Montana a 15% increase in nonresident fishing licenses results in 69,884 more fishing days on average by nonresidents in 2006.
- If Wyoming residents reach Montana levels, average fishing days will increase by 1 day per resident, resulting in 96,000 more fishing days demanded.

How This relates to Wyoming

Supply

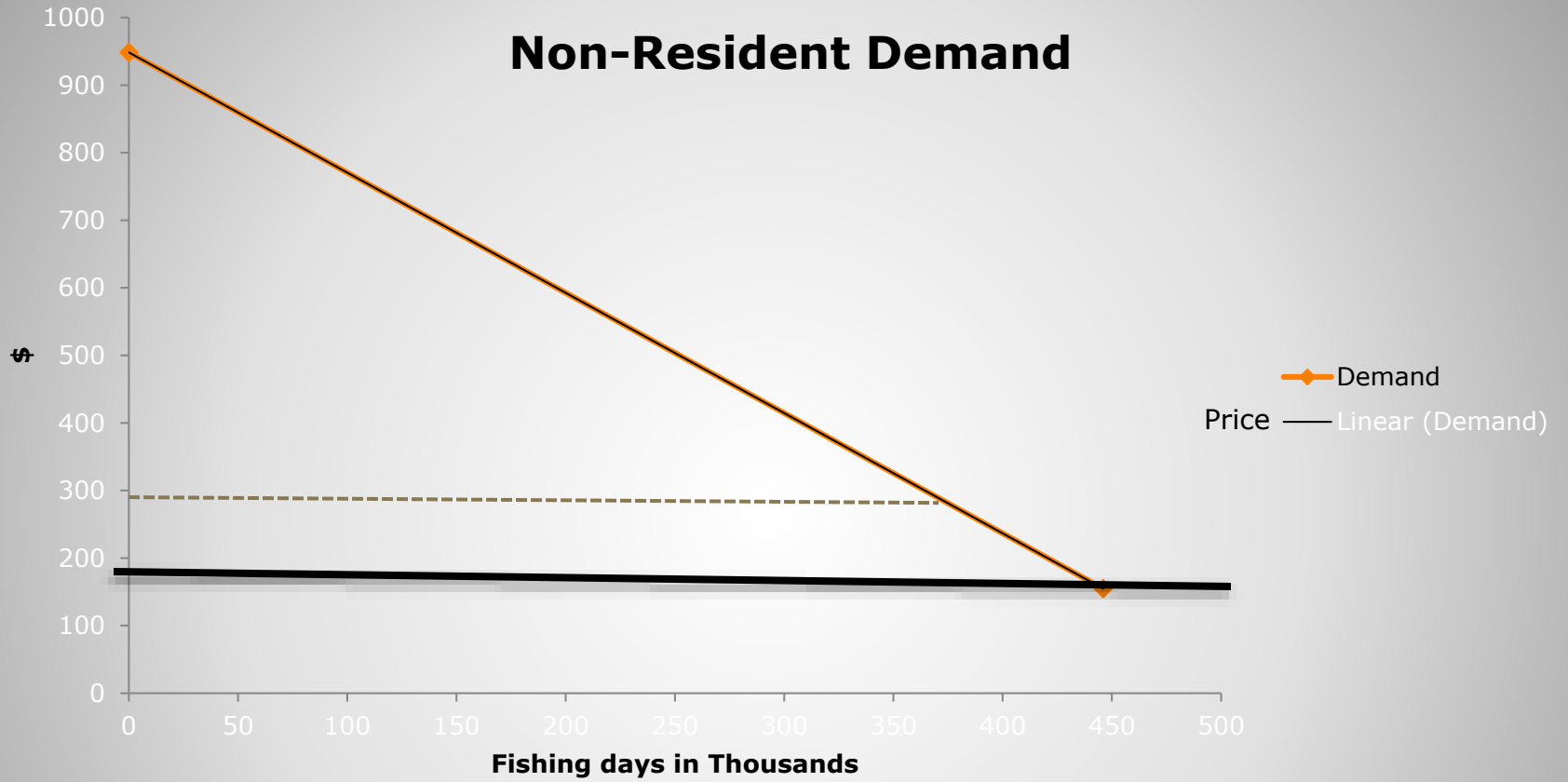


The Supply Curve

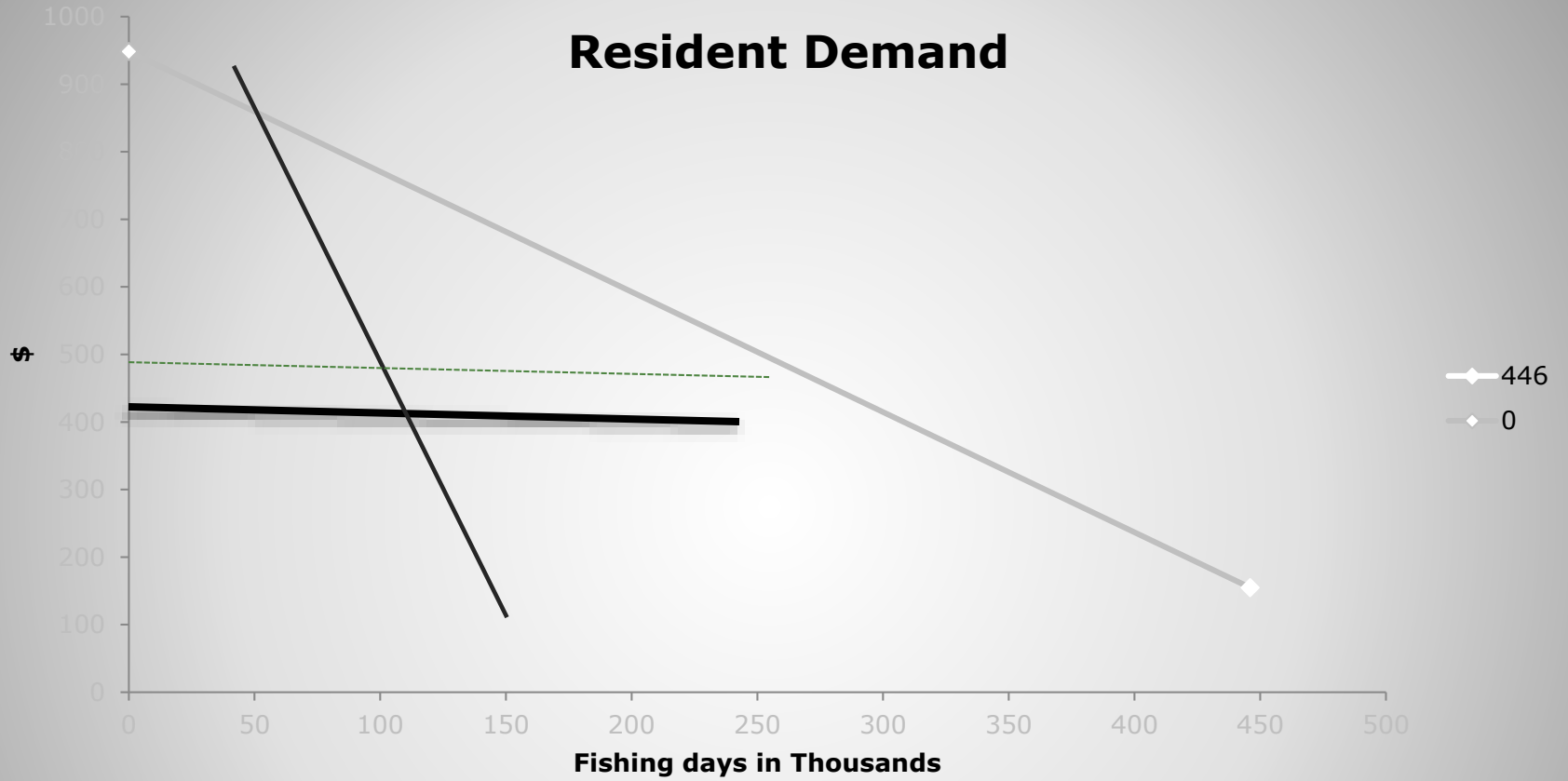
- Pays landowners for easements along streams and lakes in Wyoming according to the amount of land and length of the contract.
- Most land committed to this program stays open for the foreseeable future if the regulations and proper conduct is followed.

The Walk in Fishing Access Program

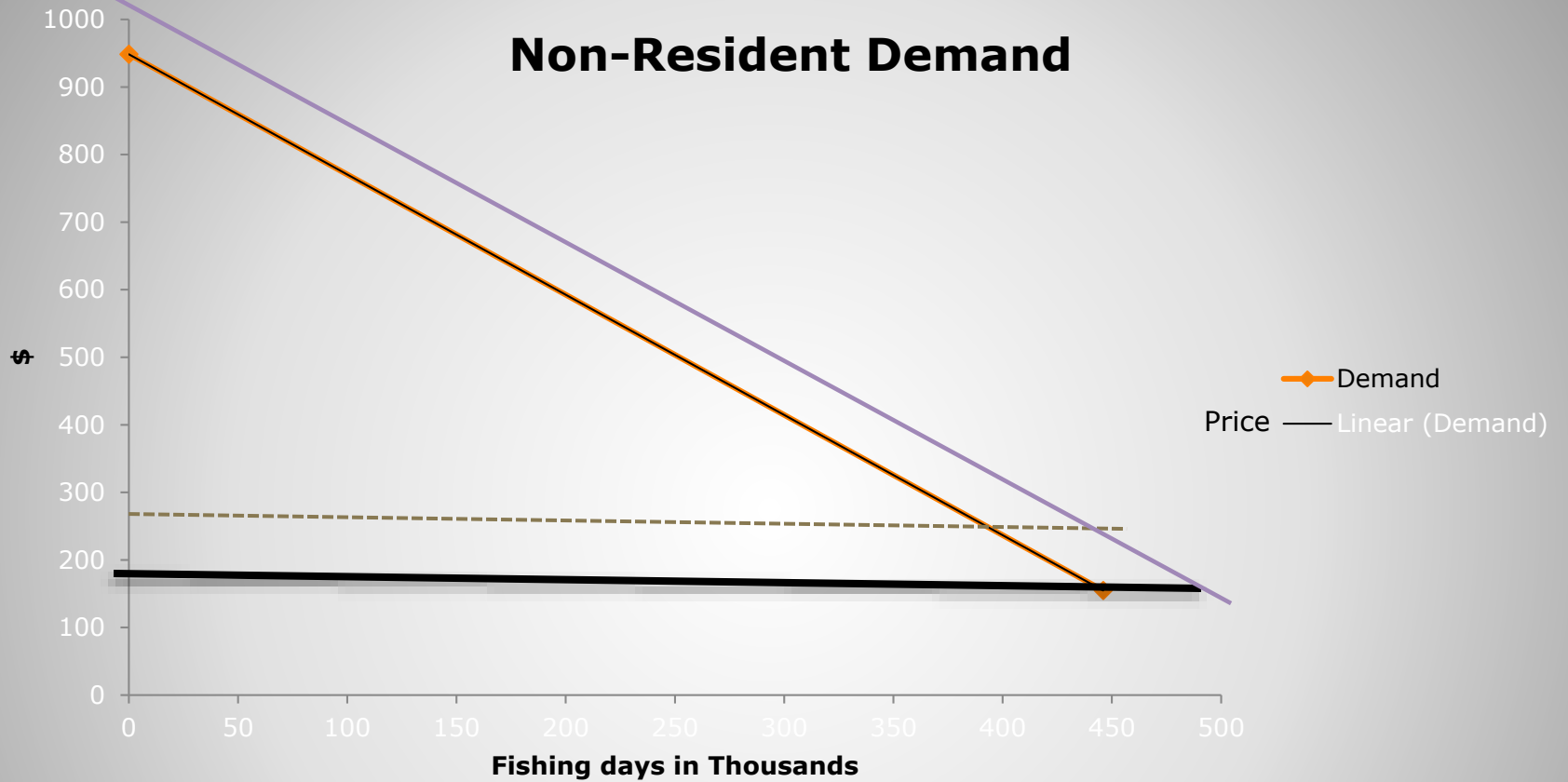
Non-Resident Demand



Resident Demand



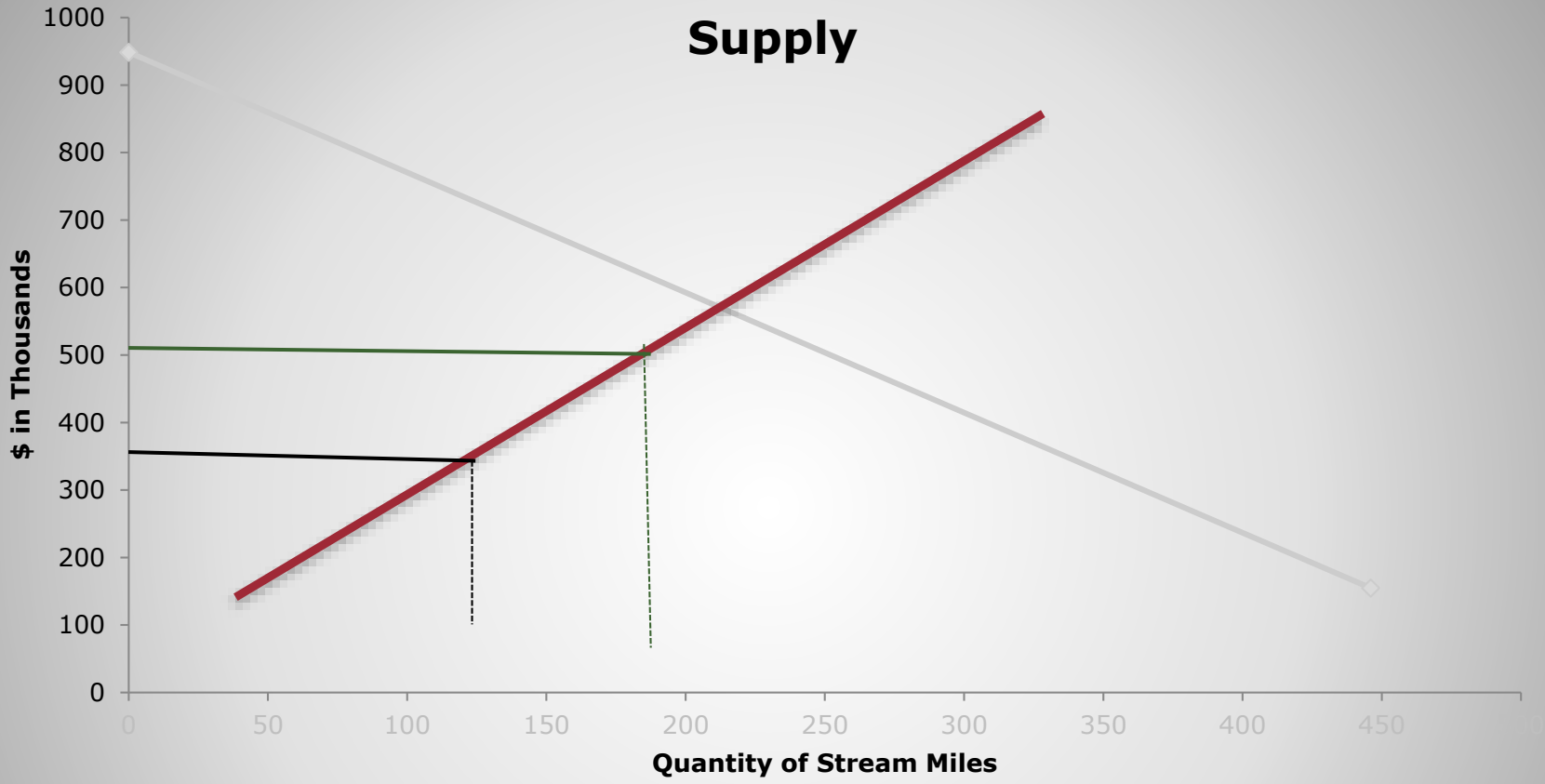
Non-Resident Demand



Resident Demand

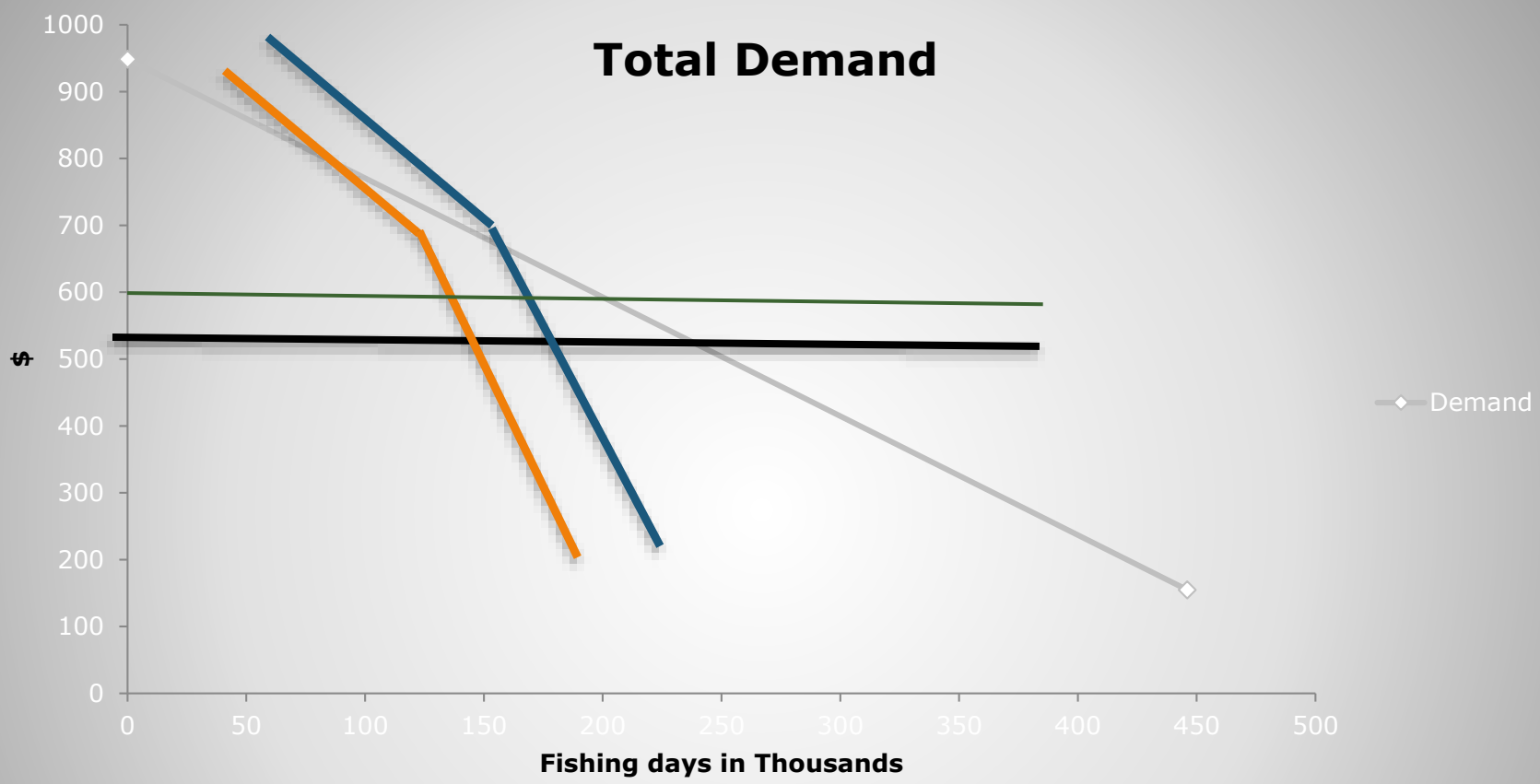


Supply



The Supply Curve

Total Demand



- There's a reason why we have the best trout fishing in the United States and the best access law," says Bruce Farling, director of Montana Trout Unlimited. "It isn't coincidental: When people have access to rivers for fishing, they are motivated to protect and restore them.
- It is possible to transfer the incentive for stewardship from landowners to the public.

Collective Action