



WE GET YOUR DRIFT

July 6th, 2011

FlyWater is pleased to present our proposal for the Ranch at Roaring Fork Fishery and Waterways Master Plan Project. Following project charter, project approach, scope of work and fees, schedule and terms.

PROJECT CHARTER

The following project charter was created specifically for the Ranch at Roaring Fork Fishery and Waterways Master Plan Project. This charter is based upon the overall vision for the fishery being: *A sustainable fishery that produces a world class fishing experience integrated into an operational western style ranch community. Managed for nominal maintenance, water and land resources blend opportunities for fishing, solitude, wildlife viewing, and peaceful reflection.*

Master Plan Project Vision:

The Master Plan should address immediate concerns and 3-to-5-year long-term planning. The Plan should include critical success factors and performance measures for each phase of implementation, along with estimated costs for each phase and specific projects within each phase. The Plan should also identify work that should be completed by FlyWater, work that can be completed in collaboration with subcontractors, and work that can be completed by Ranch staff under supervision of FlyWater.

Master Plan Project Critical Success Factors:

- To protect and preserve the fishing amenity for the benefit of all Ranch homeowners.
- To create a more sustainable fishery, while reducing overall maintenance.
- To mitigate risks associated with high water and flooding on the Roaring Fork and Ranch interior streams.
- To mitigate risks or damage from fire to Ranch open spaces and waterways.
- To maximize use of our water resource and intermittent draw.
- To provide for river stabilization, silt reduction and weed control in streams and ponds.
- To efficiently manage and distribute water from ponds.
- To preserve and improve riparian habitat and fish carrying capacity of streams and ponds.
- To provide diverse angling experiences for novice to expert fly fishers.
- To preserve and enhance the waterways for their beauty and non-fishing uses.

PROJECT APPROACH

This proposal includes assessment and master plan development to include the components and achieve the objectives presented by the Fishing and Waterways Advisory Committee (FWAC). FlyWater's master plan approach is based on over two years of periodic site visits, discussions with ranch owners and anglers, and information provided in the FWAC request for proposal dated June 18, 2011. From our experiences at the ranch, it has become apparent that there is unrealized potential in the ranch's fishery resource. It has also been observed that, in addition to the fishery resource, the ranch provides non-fishing aesthetic enjoyment and recreation to all homeowners. Therefore, FlyWater's approach

involves comprehensive and integrated master planning that combines fishery maintenance and improvement with the enhancement of other associated ranch resources.

The master plan approach not only creates better fishing, but a better ranch experience for fishing and non-fishing homeowners alike. FlyWater's philosophy for fishery development is that the quality of a stream or lake is a direct reflection of its watershed. This includes adjacent land use and maintenance. Improved and stable stream channels, favorable flow regimes, and productive and fishable aquatic habitats are all necessary for the ranch to realize its fishery potential. Creating and maintaining these conditions, however, requires attention beyond the stream channel and lake shorelines. To support and sustain great fishery health, the master plan must also consider and integrate the enhancement and maintenance of ranch water resource infrastructure (WRI), flooding and drainage patterns, and riparian vegetation diversity.

To create a workable master plan, preliminary data collection and assessment is necessary. Since the master plan is not being prepared as a concept illustration, but as a working document for planning and decision making, components of the master plan must be based on detailed site information. Some of this information is available from the ranch's geographic information system (GIS) and other available sources. However, additional data collection is necessary and site visits are necessary to collect detailed topographic data and to characterize aquatic and terrestrial biota, water resource infrastructure, water quality, and ranch drainage patterns. In addition to use during master planning, the collected information is stored and managed in the ranch GIS database for future project use.

As data collection and assessment are completed the master plan is prepared as an integrated approach to discrete project work. In this way, projects can be performed individually, in phases, while maintaining the overall vision for ranch and fishery improvement. Components can also be separated for prioritizing and creating a long range work schedule, or to have separate parties complete multiple projects at the same time. For example, multiple projects within one stream can be completed over several years, and with direction from the master plan, each project will compliment the next to benefit the stream as a whole. Additionally, projects associated with riparian canopy fire mitigation may be initiated by ranch staff while contractors perform stream channel improvements or lake enhancements, and coordination through the master plan ensures that one effort compliments the other.

SCOPE OF WORK and FEES

1.0 Assessment

- Task 1.1: Water Quality Sampling
- Task 1.2: Stream Channel Hydraulic Survey and Sediment Characterization
- Task 1.3: Stream Channel / WRI Characterization
- Task 1.4: Aquatic and Terrestrial Biota Characterization
- Task 1.5: Fishery Hydrology

Fixed Fee: \$7,445.00

2.0 Planning

- Task 2.1: Conceptual Design of Fishery Improvements
- Task 2.2: Conceptual Design of WRI Improvements

- Task 2.3: HEC-RAS (Hydrologic Engineering Center's River Analysis System) Modeling of Representative Reaches Depicting Existing and Proposed Conditions Including Aquatic Habitat and Sediment Transport Analysis
- Task 2.4: Cost Estimating
- Task 2.5: Master Plan Documents

Fixed Fee: \$12,510.00
Total Fixed Fee: \$19,955.00

SCHEDULE

Task	Anticipated Completion
Task 1.1: Water Quality Sampling	Ongoing
Task 1.2: Stream Channel Hydraulic Survey and Sediment Characterization	August 2011
Task 1.3: Stream Channel / WRI Characterization	August 2011
Task 1.4: Aquatic and Terrestrial Biota Characterization	August 2011
Task 1.5: Fishery Hydrology	August 2011
Task 2.1: Conceptual Design of Fishery Improvements	September 2011
Task 2.2: Conceptual Design of WRI Improvements	September 2011
Task 2.3: HEC-RAS Modeling of Representative Reaches	September 2011
Task 2.4: Cost Estimating	October 2011
Task 2.5: Master Plan Documents	October 2011

TERMS

Negotiable