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TO: City of Raleigh Parks & Recreation Department
Falls Whitewater Steering Committee

FROM: Cindy Szwarcop, AICP

DATE: 8/19/2010

REFERENCE: Falls Whitewater Steering Committee Meeting #6
August 16, 2010

STEWART PROJECT NUMBER: C09047

Meeting Attendees:

Shari Bryant, NCWRC
Sarah King, Paddler
Bob Zarzecki, Paddler
Elizabeth Gardner, Paddler
Russ Scheve, Carolina Canoe Club – Swift Water Rescue
Chief Frank McLaurin, Swift Water Rescue
Kathy Capps, City of Raleigh
Vic Lebsock, City of Raleigh

Design Team:

Garry Walston, RLA - Stewart
Cindy Szwarcop, AICP – Stewart
John Jenkins II, PE - Stewart
David Boyette, PE – Stewart
Aaron Asquith, McLaughlin Whitewater (via phone)
Risa Shimoda, McLaughlin Whitewater (via phone)

Meeting Agenda:

1. Impact of water diversion in the north channel
2. Discussion of Dam Images
3. Swift Water Rescue Training Needs
4. Land Based Elements Discussion/Design Session

Meeting Discussion:

Water diversion

- Vic noted that the tables show that flows will still go to the north channel just not as much. Look at the existing/proposed conditions, the channel never loses water below the low flow standard. The north channel will still get water with increased releases just not as much.
- The depth of the water (unaltered vs. altered) is shown in the table.
- As flow increases the depth increases at each stage.
- **The important distinction is that the depth is still there. It was noted that this should be shown graphically on a map.**
- The average width in this portion of the river is 140', this project proposes to reduce down to 115' in width.
- At 2000 cfs water tops the divider island. The changes are very small at 2000 cfs, going back to natural flow split.
- The goal is at low flow to maintain the majority of what is in the north channel.
- Tom Freeman asked "assuming there is a constrictor device, will there be a backwater effect to the upstream portion of the pool?" Aaron will look into this and provide an answer.
- Will there be an increase in tail race elevation due to the installation of the divider?
- Shari Bryant noted that the NCWRC still has concerns regarding whether shad will be able to move through the north channel. She noted that the



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500 to 1000 cfs flows are critical. She believes that the diversion of water to the north channel could reduce andromonous fish flows by 13 percent (since the south channel would include the whitewater course).

- Shari noted that it appears that 700 cfs really is 522 cfs in the north channel (with diversion). With the proposed plan fish would need 1000 cfs to get to the 700 cfs flow level.
- Is it possible to construct the diverter island with adjustability? It was noted that it had been decided by the committee and community groups that the diversion island should not look mechanical, but rather mimic the natural surroundings.
- Is the last 900' that important to the shad? The shad can't get past Milburnie Dam. Shad haven't been able to move up this area in the past 100 years.
- If the project can't produce the volumes needed for shad movement, can we create a habitat below this area for spawning? Look at creating this area 900' short of the course. This option would negate potential fisher/kayaker conflicts.
- How many days of the year do shad spawn? Shari noted that it depends on the water temperature and flow.
- Is the water temperature favorable to shad since the water comes from the reservoir? Tom note that the water comes from the top of the pool.
- From an operational standpoint – would paddlers have any impact on the sandy area just on the west side of the bridge? It was noted that it isn't believed that the upper low flow notch will be an area where boaters will want to paddle. This is a prime bank fishing area.
- Kathy Capps noted that Seth Yearout (Adventure Programs Director) could not attend the meeting, but forwarded on to Kathy a list of wants/concerns:
 - Is there an opportunity to vary the drops? Aaron Asquith noted that if there is a strong push for a specific type of training environment, they will try to incorporate those elements.
 - The drops have less teaching value with three straight down the middle play areas.
 - Could a boulder be put in the middle of the second play area to guide people left or right?
 - The Adventure Programs staff would like to see as much diversity as possible for teaching value.
- The Steering Committee needs to identify the play features/moves they wish to see in the park.
- Could the side spill areas be enlarged to enable fish to pass on the side? McLaughlin to study.
- NCWRC will do additional research and report back to the Committee.
- Steering Committee would like McLaughlin to further explain the modifications to the two low-flow notches.

Dam Image Discussion

- The faux rock mimics the natural environment.
- Does the top of the divider island need to be uniform in elevation? No, it can be raised or flat.
- Faux rock can be shaped to give irregularity, but it also gives a high level of control from an engineering perspective.
- Sliding failures are less of a concern with faux rock installations.
- Tom Freeman noted that he prefers the faux rock option because in times of high release levels, if the divider island is "blown out" there will be less to clean up.
- It was noted that the faux rock installation at the Ocoee has withstood releases of 70,000 cfs.
- The Steering Committee members in attendance noted their preference for the type of dam structure: City of Raleigh prefers the faux rock option as it will be easier to maintain and get permitted; Paddlers – faux rock; Corps of Engineers – faux rock; NCWRC – faux rock. It was acknowledged that not all groups were in attendance today (Tom Wright representing the adjacent homeowners and Alissa Bierma with the Neuse Riverkeeper Foundation) so these groups will be asked to note their preference.



Swift Water Rescue Training Needs

Cindy noted that there were two new members of the Steering Committee in attendance this evening: Russ Scheve with the Carolina Canoe Club (Swift Water Rescue Training) and Chief Frank McLaurin (Raleigh Fire Department).

Russ Scheve noted the following swift water rescue training needs/wants:

- Wheelchair access, handicapped access. (Vic noted that the park must meet ADA requirements).
- Wading areas to move people across the river.
- Waist high water.
- Swift water entry.
- Footing areas conducive for training.
- Defensive position to aggressive position.
- Strainer bar drills, deeper the flow the better.
- Anchor points – downstream side of the rocks.
- Anchor bars across outflow.
- “Live bait” rescue.
- Ropes throwing.
- Zipline.
- Pinning of boats – vertically.
- How wide does water have to be for training? 20 to 25’ is adequate.

Chief McLaurin noted the following swift water rescue training needs/wants:

- They utilize 16-18’ Zodiacs.
- Would like four, 45- 50’ bays (truck/trailer parking + bus parking).
- Would need improvements to the existing canoe launch so trucks could back in to unload equipment.
- Anchor points on island (one on either side). Will need several hundred sf on each side for anchoring and area to work. They need a 15 to 1 safety ratio (ie) 250 lb would need a 3000 lb anchor point.
- Permanent prop to mimic car rescues.
- Helio/aquatic rescue.
- Could class 3 rapids be provided?

Land Based Elements Discussion

1. Access/Accessibility/Comfortable Walking Distances

- There must be ADA accessible points at the put-in and take-out areas.
- Due to new regulations, the park must be ADA accessible. The greenway trail will be the best ADA accessible option.
- Existing drive/parking lot will be improved.
- Improvement to the canoe launch.
- Parking lot is approximately 1600 feet from the put-in area. What is a comfortable walking distance for the paddlers?
- What is the ideal location for the parking lot?
- There is a 10 foot grade change from the canoe launch to the river.
- Can New Falls of Neuse Road be shown on the maps? It was noted that this roadway is east of our project area and does not impact this project area. We can provide a small reference map.

2. Vehicular Movement

- Parking Needs
- Flow for Boaters
- Should a drop-off area be included? Most paddlers will park in the existing lot and walk their boats to the put-in.
- It was noted that people may park at the Corps parking lot and then boat down.
- Does the drive need to moved south?
- Should think about a parking lot north of the new drive location.
- Can parking be placed at the end of the course? Yes.
- What about parallel parking along the entrance road? Concerned about constricting the roadway to too narrow of a width as people may parallel park on each side. The City would prefer not to have parallel parking.
- How many spaces are appropriate? The number of spaces that we are able



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to provide will be driven by the size of the site. Vic noted 30 to 40 spaces.

3. Changing Room

- Should restroom/changing facilities be built within the parking lot area?
- It was noted that there is a concern regarding potential vandalism.
- It was noted that the paddlers aren't interested in changing facilities.
- Vic noted that we need to think of this as a master plan for all users of the park.
- Kathy noted that the changing facilities would be well used especially for new people.
- A restroom facility would also be good for greenway users and spectators.

4. Spectator Areas – Bridge Abutment

1. Should there be an elevated spectator area?
2. Need to determine the appropriate size.
3. Perhaps a terraced deck, boulder structure or a back-filled retaining wall.
4. Ask McLaughlin for the typical number of users in spectator areas.
5. Viewing areas along the river, perpendicular river access areas.

5. Signage – Branding

- Work with the Corps as they have participation signage.
- Need Educational/Boater Safety signs.
- Environmental Education
- It was noted that the Corps has a "Giant Voice" notification system that announces when the water releases are being increased.

6. Materials

- Options for materials for boardwalk. Design team to make recommendations.

Water Use Control/Conflict

- How to split the usage of the facility between City of Raleigh programs, paddlers, training, etc? How can you tell the public that they can't use the facility during certain times?
- Not sure how this will be controlled, it is a relatively small area to share a great deal of programs.
- Vic and Kathy noted that there will need to be a MOU for shared use.
- It was noted that there will be a great number of swift water rescue teams that will want to use this facility.

Wish List

- Lights so that the park may be used at night.
- Livery operations by the City of Raleigh for boat rentals, tube rentals, etc.
- Concessions?

Next Steering Committee Meeting

- Tentatively scheduled for Monday, 9/20 from 5pm to 6:30pm at the Corps of Engineers Visitor Center.

Project Schedule:

- Meeting #1 (Kick-off Meeting) – January 19, 2010
- Data Collection/River Survey – Complete – May 2010
- Preparation of Conceptual Design – May to Mid-July 2010
- Community Meeting #2 – July 14, 2010
- Design Development Stage – Late July through October 2010
- Community Meeting #3 – Mid-October 2010
- Complete Design Development Drawings – Mid-November 2010



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Attachments:

- Memorandum prepared by Bob Zarzecki
- Summary of comments received since Community Meeting #2