

**Virgin River Watershed Analysis Meeting
Watershed Issues Exercise Summary**

August 17, 2006

During the watershed meeting a planning session in which a large group response exercise was carried out to facilitate discussion of issues. The large group response exercise is a technique for public involvement. It is a step-by-step way to quickly elicit, display and summarize responses of a large group of people to a set of questions.

In carrying out the exercise participants were provided with sheets of paper with spaces to write their answers to three questions. Five minutes were allowed for participants to answer each of the questions and then time was allotted for them to mark their most important response to each question. Finally participants wrote that most important response on a Post-it note and pasted it to flip charts around the room.

To summarize the responses and allow for further discussion the participants split into one group per question to summarize and present responses to the entire group. Approximately 62 people participated in the meeting, although only 54 response sheets were collected.

The responses to each question are given below, with them grouped based on key words and themes. The first set of responses includes summarized individual responses from the yellow response sheets handed out, second is the most important responses as posted by individuals. Lastly the summary of responses and discussion that followed is included.

Question 1: What are the biggest problems facing the watershed?

Individual responses

- Floodplain management, development, flooding and erosion (31)
- Invasive species (tamarisk, cheat grass) (29)
- Development pressure, general land use planning, and sustainability were mentioned 27 times.
- Endangered species habitat (15)
- Water supply, quality, drought (14)
- Wildfire and its effects (12)
- Communication/cooperation (or lack of) (7)
- Water quality, salinity, storm water runoff (6)
- Channel maintenance (ability to carry out) (7)

Other comments listed included: water rights abuse, protection of the environment, public use and recreation is needed, need understanding of groundwater interactions, agriculture, livestock management, conservation ethic, archaeological site protection, and off road vehicle use.

Most Important Responses

- Floodplain management (15)
- Land use planning (13)
- Invasive species (13)
Includes 3 wildfire and invasive together
- Water availability, including 1 specific to quality (10)
- River function, habitat, endangered species, channel maintenance (7)
Included one mentioning too much focus on endangered species

Group Summary

- Invasive species (human, plant, animal)
- Limited resources (water/land)
- Lack of floodplain management (no integrated floodplain management)
- Narrow vision focus on floodplain management focusing on floodplain, river (not considering uplands and headwaters)
- Land use is affecting the watershed.

Question 2: How do you recognize successful watershed management?

Individual responses and most important responses to this question proved more difficult to categorize. Similar themes ran throughout the responses however and are summarized below.

- Sustainable development
- Water quality
- Cooperation
- Comprehensive planning
- Healthy ecosystem
- Floodplain management
- Reduced invasive

Group Summary

- Cooperation-lack of conflict
- Floodplain management/mitigation
- Healthy functioning ecosystem
- Effective planning tools (monitoring)
- Knowing/understanding resources

During the next 10 years what could be done to improve watershed management in the Virgin River Watershed?

Individual Responses

- Better Management Practices:
 - Improved floodplain management (21)
 - Invasive Species control & management (18)
 - Improve land use planning to minimize environmentally destructive effects from development (16)
 - Develop environmentally sustainable management practices (8)
 - Develop water resource management practices that will balance water needs of people and environment (7)
 - Develop practices that will reduce forest fires (6)
 - Develop sustainable practices that will improve water quality (6)
 - Establish monitoring & adaptive management program (5)
 - Management practices need to be constant throughout watershed, not different depending upon geopolitical boundaries (4)
 - Develop a watershed management plan (3)
 - Require ALL development use BMPs (2)
 - Improve upper watershed first (2)
 - Focus on solvable problem first
 - Develop clean-up plans for when disasters occur in the VRW
 - Implement HCPs
 - Maximize control of ATVs
 - Do not develop any new road systems
 - Do not allow diversion of the VR & MR water
 - Remove 95% of population
 - Raindance control

- Research & Development
 - Fill data gaps (3)
 - Set up a data warehouse for watershed (2)
 - Develop a numerical model to simulate hydrologic processes – ppt/runoff/gw/sw

- Studies/Programs
 - Restore Riparian habitat (12)
 - Public Outreach/Education (7)
 - Flood control (3)
 - More ecosystem recreation opportunities (3)
 - Stabilize upland (3)
 - TSE species recovery & delisting (2)
 - Develop a Flood Warning System for VRW
 - Provide funding and means to continue NRCS VR & tribs improvement & management projects

- Pool funding for projects
- Develop new channel to limit effect on natural systems
- Oversight & communication
 - Develop a land use/sustainable management/development committee (3)
 - Coordinate through existing LOCAL watershed groups (2)
 - Improve agency/community coordination by identifying common goals and objectives, developing consensus policies, and encouraging adoption of policies by agencies & communities (2)
 - Treat all issues equally and fairly
 - Develop a unified definition of “healthy” river corridor
 - Hold annual stakeholder meetings
 - Create a core committee from this group

Most Important Responses

- Invasive species/vegetation/habitat management (15)
- Develop watershed wide plan (10)
- Managing urban encroachment (10)
- Public education, outreach, and involvement of locals (5)
- Control & Maintenance of sediment deposits (3)
- Local control of managing streams and tributaries (2)
- Continued hydrologic monitoring program (5)
- Control off-road vehicles (1)
- T&E Species Recovery (1)

Group Summary

- Develop watershed wide plan
- Invasive species/vegetation/habitat management
- Managing urban encroachment
- Public education, outreach, and involvement of locals
- Control & Maintenance of sediment deposits
- Local control of managing streams and tributaries
- Continued hydrologic monitoring program
- Control off-road vehicles