Data Submitted (UTC 11): 2/19/2020 5:00:00 AM First name: Judith Last name: Dumke Organization: Title: Comments: RE: Aquatic Ecosystems Supplement

I looked for, and did not find, any references to the resources on larger streams and rivers that can be found at ORSANCO. It is possible that it is subsumed under the reports from the Ohio

EPA but in case it is not, I would like to recommend looking at their information, as it may be more recent than some of material included.

My overall impression is that the IRD suffers from a lack of information which should be the subject of additional research in the time the revised plan is in operation. This is recognized on page 21 of the supplement. One feature that occurs on this district is constructed "wildlife water holes" some of which may function as ponds or even vernal pools if they have partially filled in. Generally they retain steep sides and do not created edges for typical pond shores. They also are safety hazards in areas where wildlife use has not created visible paths.

I noted a lack of comments on the basic soil present in some of the western areas of WNF and its effect on water PH.

Classically cold water streams support salmonid (trout) populations, are there indeed streams that meet this criterium, or is a broader discriminatory metric being used?

Under connectivity I noted that the primary distribution of butternuts by water in riparian areas is not mentioned, although this is a species of concern because of canker.

Streams flowing into the Ohio River from the south carry organisms and propagules, which then can be deposed in the lower reaches of all sizes of streams which are backwater areas during flood events. An example would be Virginia Mallow, Sida hermaphrodita and perhaps Q. falcata, southern red oak. These locations are also loci for NNIS penetration into the watersheds draining into the Ohio.

The influence of topography on the availability of suitable land for riparian areas is not addressed. When there is a very steep slope abutting a stream typical riparian characteristics are not present, thus a lack may not be due to degradation.

The influence of recreational use on lakes and ponds is not addressed, although the UTV vehicle use is mentioned as a stream (all sizes) concern.

Page 36 How does WNF "limit" change, that seems to set up an impossible goal.

Under NNIS the spread of stilt grass and small carpet weed in riparian corridors is very prevalent in the IRD, by displacing native vegetation which has a winter/spring presence the potential for erosion is enhanced.

The effects of year to year variation in water availability and temperature on vernal pool and constructed water bodies as a research topic could be stressed more.

The Muskingum and Ohio Rivers are at such a scale, perhaps they should have a special treatment, including the impact of navigation on banks and dams on flow.