January 24, 2000

TO: EQB Water Plan 2000 Teams

FROM: Metro Inter-Basin Subcommittee

SUBJECT: **EQB Water Plan 2000**

INTRODUCTION

As predicted in Camp Ripley in September 1999, December proved to be truly a "lost month". We received and generated some interesting information at our last meeting on December 14 and from commentors up to our December 20 deadline. We were torn with how best to present the opinions. In the end, this text reflects what we considered to be the "keepers". We have attached several letters from commentors in order to fully present their opinions in an unabridged format. In particular, the December 19, 1999, letter from Paul Nelson to Paul Toren was difficult to capture within the format which focused on indicators. His letter speaks eloquently to the unification issue.

A WORD ABOUT THE METRO INTER-BASIN SUBCOMMITTEE

We exist because of the huge changes the metro concentrates in a small area. The metro represents a highly localized, minority land use in each of the four basins it straddles.

The seven county metropolitan area is a small part of the Minnesota River Basin (4% at the very bottom), the Upper Mississippi Basin (7% at the very bottom), the St. Croix River Basin (10% at the very bottom), and the Lower Mississippi River Basin (a drop in the flow-through bucket). As such, the Metro Basin isn't likely to have a major affect on the top priorities for any of these four other river basins.

Our position in portions of four basins led us to initially plan on giving watershed specific comments to each of the four groups. In the end, comments specific to a watershed were dwarfed by those that applied to all basins. A few watershed specific comments are included in the mix and we tried to identify those clearly within the constraints of the stipulated format.

1: CHANGES TO GOALS AND OBJECTIVES

Most of the metro area discussion centered on indicators (vs. goals and objectives). However, a very strong sentiment was expressed for the need to have a goal that addressed building local capacity for water management. (See attached letters.)

- Add an additional (fifth) goal: *Minnesota will have a locally responsive and capable water governance structure*. This goal is needed because agencies and organizations across the country are recognizing that local ownership is the key to making progress in water resource management.
- An objective for the new goal could include: *Ensure adequate financial resources for local water management organizations*. This objective is important because results are primarily generated at the local level. Two indicators to go with this objective are: 1) percentage of land area within a self-funded water management entity, and 2) percentage of the State "environmental" budget allocated for local water management entities.
- An additional objective for the new goal stated above could be*: Enable capable local organizations to assume State authorities (with proper checks/balances) when they can be more effectively managed locally, and to reduce redundancy.*
- Consider an additional objective for building local capacity: *Create and utilize two-way accessibility in data management systems.* Both state and local organizations could benefit from this.
- Alter the "conservation" goal by deleting the text after the word "resources."
- Drop Objective "F" because it is redundant with Objectives A, B, E and G.

2: CHANGES TO INDICATORS

There was a strong consensus that *most* of the indicators should be dropped or altered. For example, many of them measure populations when populations merely reflect what's going on with the habitat – which is easier to measure and analyze with GIS tools at both state and local levels.

- Change Indicator #2 to Nitrate/Nitrite.
- Drop Indicator #4 (BOD) because it is highly reach dependent and better represented by indicator #21 (aquatic invertebrate population).
- Drop Indicators #9, #10 and #12 as they all tend to be very localized and not attributable to widespread behaviors and practices.
- Alter Indicator #14 to read: Trends in stream *base* flow. Base flows are typically less dependent upon recent precipitation events and provide a stable set of data for measuring when groundwater contributions to the river are reduced through either impervious surface creation or groundwater withdrawals. This is a metro problem resulting from development. We suspect excessive tiling would create a similar trend.

- Drop Indicator #15 (wetland acreage). Acreage doesn't speak to the issue of the "quality and diversity". We don't see functions and values analyses being conducted in sufficient numbers to provide a measuring stick.
- Drop Indicators #16, #17, #18 and #19. All of these populations are migratory species we thought would be affected by habitat loss or "acute lead poisoning" outside of Minnesota. They all would appear to be highly influenced by precipitation trends and distribution as well.
- Drop Indicator #20 (frog/toad population). We didn't think that this data set existed or that creation of it would be worth the labor necessary to do so.
- Expand Indicator #21 (invertebrates) to include indices of biotic indicators or community indicators. Several metro watersheds are bio-monitoring already.
- Drop Indicator #22 as this species is too tolerant of changes in water quality to measure change. A possible species to consider is the rock bass (?)
- Indicator #25 should include both motorized and non-motorized boats.
- Drop Indicator #27 (miles of stream easements) This is better measured with total acreage held within conservation easements. Indicator could address number of public accesses.
- Drop Indicators #28 and #29 and replace with public opinion surveys that are broader in scope. Boater satisfaction should also include non-motorized craft.

3. OTHER INDICATORS (BEHAVIORAL AND OTHERWISE)

The text in this section lists behavioral indicators as well as a few environmental indicators that were not included on the draft indicator list. We believe these behavioral indicators offer the most promise for measuring how Minnesota's water resources will respond in the future and for involving local organizations. Regardless, we hope the final list is manageable (<30 indicators).

- **The most important indicator for the southern and western "halves" of the state is the measurement of crop residue. Period.** Numerous studies point to residue management as a practice that has room for improvement and will drastically influence most of the pollutants included as indicators in the draft indicator list. The CORE 4 program goal is 30% residue coverage on planted cropland. Minnesota currently has only one-third of this land with greater than just 15% residue. This data is collected by the SWCD's.
- Agricultural acres within nutrient management programs is another element of the CORE 4 Program and directly measures Minnesota's success in dealing with the feedlot issue at the local level. This would be collected by the SWCD's.
- Acreage of land held in conservation easements measure state commitment to attacking problems at their source.
- Per capita water use (gpd) for municipalities. This could be a wonderful source of community pride or shame. It directly relates to groundwater conservation. Efforts to reduce summertime withdrawals can help lessen the preponderance of turf grasses for more native species, thereby, accomplishing multiple objectives.

- Similar to our comments for Indicators #28 and #29, increased surveying of the public to gage whether educational efforts to date are being successful in not only informing the public but *altering* behavior as well.
- Consider indicator under Objective E for time bankfull flows are exceeded.
- Measure watershed yield for total runoff volumes. This could be accomplished using continuous flow recorders at watershed outlets and NEXRAD for measuring rainfall. As drain tiling, storm sewer and impervious surface increase, the yield from watersheds increase measurably.
- Miles of drain tile sold/installed.
- Document biennial existence of clear state level guidance to local water managers of specific priority actions the collected agencies recommend. Local government could consider these as it develops goals and targets.
- Percentage of state in watershed districts or similar self-funding water management structures (i.e., stormwater utilities). Currently 26% of state and 32% of metro area are in WD's.
- Major tributaries in the metropolitan area have assembled baseline data using continuous flow gages and sampling equipment. Trend analysis will be possible by the year 2010.
- Total area where purple loosestrife is the dominant vegetation.
- Tabulate tons of residential fertilizer sales (preferably on a P-weighted basis). This seems like a MDA function and could document education success.
- Stream miles exceeding MR7050 standards or meeting aquatic life classifications.
- Estimate percent <u>effective</u> imperviousness within urbanized areas. The greater the amount of tributary area that doesn't, in fact, contribute water to the outlet, the better the water quality will be.
- Consider non-complying ISTS near priority Minnesota lakes under Objective B.
- For the lower Mississippi basin, acres of wild rice (non-paddy) were mentioned.
- In the St. Croix River Watershed, the percentage of lands identified in DNR's county biological surveys which have permanent conservation easements or ownership. This will allow these areas to be protected and for greenway efforts to be able to count on their existence as public and private greenways are slowly established to link them.
- In the St. Croix, there are a number of non-contributing areas that will be pressured to develop outlets. Identifying these areas with local governments and tracking which end up being "connected" would be insightful.
- In the Minnesota River Watershed, the amount of land enrolled in state or federal protections programs is crucial. There approximately 1.5 million acres of CRP land in Minnesota (out of 23 million acres of cropland). While Minnesota's easements are almost entirely permanent, federal contracts typically are for fifteen years only and could result in an incredible setback to the gains achieved under the CRP program if they return to cropland following contract expiration.

- Feet of shoreland of public waters that are in good, bad or ugly condition. A major DNR program has been initiated to raise the awareness of poor shoreland practices. Quickly documenting shoreland conditions in layperson terms for key lakes in each watershed would provide a benchmark for whether the percentages for each classification have gone up or continued a depressing decline.

4. TARGETS

It would be possible to guess at some targets at this point. For example, the last bullet in Section 3 (relating to shoreland conditions) could have a target established of 50 percent of the shoreland of priority lakes being in good condition and at least 25 percent in something other than an armored condition.

We don't think this is useful at this time (even though we've included some in section three). These numbers are best derived as goals at the local level. Major trepidation was expressed in the Metro area that the state's dabbling with targets would effectively take on the weight of standards/requirements. (See additional discussion on this in Section 7.)

5. TREND MEASUREMENT

We have included ideas for measurement where we though it would not be abundantly clear in the above sections. We thought it was premature to develop measurement concepts for indicators until the tabulation from all the basin teams is narrowed down further.

6. PUBLIC INVOLVEMENT PROCESS

The Metro Inter-Basin Subcommittee utilized a public meeting held on November 16, 1999, at the League of Minnesota Cities building. We handled noticing and soliciting of information electronically through the large list of addresses BWSR and Met Council had for non-profit organizations, watershed organizations, soil and water conservation districts and cities. In addition, we relied heavily on the League of Minnesota Cities and the Metropolitan Area Watershed Management Organizations to utilize their existing coordination networks to attract comments.

Overall, the response to the Water Plan 2000 effort was nearly non-existent. In the metropolitan area the planning efforts being conducted at the county, WMO and city levels tends to provide a more productive outlet for stakeholder involvement. In addition, you will note in a few of the attached letters an undercurrent of doubt. It is not uncommon for local water managers to wonder why the state with its numerous overlapping level programs chose to involve only two non-profits to represent local interests and excluded soil and water conservation districts and watershed districts that carry out the bulk of local implementation.

7. ADDITONAL INFORMATION TO CONVEY

- There is a large fear that the indicator targets will take on the weight of requirements. Multiple commentors stated that not enough was known for the state to determine for all levels of conveyances what standards were necessary. For this to happen in the long run, local implementers need to analyze their situations to reflect the inverse relationship that exists between watershed size and water quality. As a director of public works put it, "we have different design standards for interstates, highways, collectors, arterials and alleys. The standards should vary for rivers, streams, ditches, storm sewer and swales as well."
- Water Plan 2000 was met with some skepticism for its ability to influence water management at local level. Several commentors felt it could accomplish more by addressing institutional capacity issues at the state level prior to attempting to set indicator targets which may inhibit local flexibility to respond to multiple objectives. Many local units do not look to the state as the source of the help they want. They would like this plan to anticipate the states role for areas where local capabilities exceed that of the state.
- We highly recommend the use of several economic indicators to track environmental progress. The percentage of government spending dedicated to the environment is not at commensurate with the level of activity citizens want to see. With the exception of indicators we suggested (i.e., acreages held in conservation easements and local capacity building), economic indicators are lacking.

S/metro/EQB 2000