THE MEDIATION CENTER

Where solutions are discovered

Group Memory

Clean Water Program Task Force

Facilitated Meeting #2 February 21, 2012
Requirements for Municipal Post Construction Standards
11:30 am to 1:30 pm
At the Lower Platte South Natural Resources District Meeting Room

This is a Rough Draft of a Group Memory of a facilitated meeting held Tuesday, 2-21-2012, in Lincoln, Nebraska. Note that this is the first draft of the Group Memory and is based on notes taken at the meeting, flip chart pages, comments made, and information shared with the group by presenters as part of the following agenda. The intent of creating a collective group memory is to capture the essence of the information shared, comments made, and questions presented at the facilitated meeting and it is not meant as a transcript of the meeting. This draft is subject to correction by contacting The Mediation Center at info@themediationcenter.org by 3-20-2012.

Task Force Members present:	
Bob Caldwell **Bud Dasenbrock** **Pam Dingman** **Jeff Emanuel** **Carl Eskridge** **Tom Franti** **Paul Johnson** **DaNay Kalkowski** **Peter Katt** **Don Linscott** **Milo Mumgaard** **Rick Onnen** **Brock Peters** **Dave Potter** **Reba Schafer** **Tim Texel** **Jim Wathen**	

Members of the Public present:
Vicki Twerdochlib

Support Staff and Resources present:
J.B.Dixon, Nicole Fleck-Tooze, Jocelyn Golden, Ted Hartsig, Ben Higgins, Wynn Hjermstad, Carter Hubbard, Ed Kouma, Rock Krzycki, Jared Nelson, Roger Tiedeman, Ellen Wright, J.J.Yost, Paul Zillig
Facilitators:
Lorrie Benson, Dave Hubbard

AGENDA

1. Welcome & Overview 20 min
   - Welcome and overview of previous meeting
   - Discussion of follow-up items
     - Technical Memo #1 Rainfall Frequency
     - Technical Memo #2 Ordinances

2. Current Water Quality Standards 30 min
   - PowerPoint Water Quality/Quantity Standards Presentation

3. Exploration and discussion in small group 30 min
   - Break into small groups to discuss worksheet questions
   - Facilitated large group de-brief

   (Themes captured on flipchart pages)

4. Best Management Practice (BMP) Presentation 30 min
   -PowerPoint BMP Presentation

5. Wrap up, Closure 10 min

Next Clean Water Program Task Force Meeting
Tuesday, March 20th 2012 11:30 a.m. to 1:30 p.m.

Reminder: this and other Task Force materials are available at Lincoln.ne.gov, keyword 'clean water program'

Mutually Agreed Upon Ground Rules: (Aspirations and Enforced as Appropriate)

- Keep in mind the Overall Goal of Clean Water Task Force: Formulate recommendations for post-construction stormwater best management practices (BMPs) for new development and redevelopment projects for sustainable clean quality water
- Agenda will go out via email prior to each meeting. Please follow and stick to the Agenda
- A hard copy of applicable documents will be handed out at each meeting
- Documents handed out at the meeting will be available prior to each meeting at the Clean Water Task Force website: lincoln.ne.gov keyword: *clean water program*
- Meeting starts at 11:30am and ends not later than 1:30pm
- Please set mobile phones, pagers, radios & computers to vibrate or silent during the meeting
- Any & all process concerns should be raised ahead of time or immediately when they occur
- A written group memory, capturing the essence of the meeting will be provided to the Task Force prior to the next meeting by the facilitators for Task Force review and comment
- Listen first to understand before seeking to be understood
- Be curious and open to learn. Speak for yourself. Communicate your own truth
- Engage in one conversation at a time; keeping to agreed upon agenda, tasks and topics
- Allow for one person talking at a time in a respectful manner to all present
- Participate in and commit yourself to the process of being open and gathering information
- Share ownership of comments, ideas, options, proposals, thoughts and any recommendations
- Be fully present and of the moment. Freedom to express ideas openly is preferred
- Act with professional courtesy and respect towards others with no personal attacks on others
- Have a balanced conversation: Inquire with a curious mind open to new ideas; Acknowledge the other; and Kindly & Respectfully Advocate your ideas with "I Messages"
- Focus is on the future
- Participants can preserve the opportunity to revisit a consensus vote
- The written Group Memory can be amended and added to
- The "Agenda" can be amended, changed, and added to by The Mediation Center (TMC) and comments can be sent to TMC before each meeting for consideration for future meetings

Discussion of follow-up items

- Goal of discussing and formulating recommendations for stormwater ordinances
- Technical Memo #1 Rainfall Frequency handout was discussed and explained (Technical Memo #1 Rainfall Frequency is available on the Task Force website)
- Technical Memo #2 Ordinances handout was discussed and explained (Technical Memo #2 Ordinances is available on the Task Force website)

Current Water Quality/Quantity Standards Presentation

- See Water Quality/Quantity Standards Presentation on Task Force website
- Presentation of the flood control approach in comparison to the water quality approach
  - Flood control projects designed using design storms, which are storms that have a probability of occurring over a set time period. Lincoln's design storms for flood control are storms that have a 50% (2 year storm event), 10% (10 year storm event) and 1% (100 year storm event) of occurring each and every year
  - For example the 2 year – 24 hour storm event for Lincoln is 3 inches and has a 50% chance of occurring each and every year
  - Flood control projects are typically designed to limit the post-development peak flows for the above storm events to the pre-development peak flow rate
  - Water quality projects are typically designed to control a volume of runoff know as the Water Quality Control Volume (WQCV)
  - For example a project would need to capture a rainfall event of 1.25 inches or less to capture 90% of all rainfalls in Lincoln
  - The Water Quality Control Volume can be calculated by:
    - Capturing a quantity of runoff (e.g. first half inch of runoff)
    - Capturing a percentage of all rainfalls (e.g. capturing all storm events that are 1.25 inches or less)
    - Base the design off a frequency based event similar to flood control projects (e.g. 1 year 24 hour storm event)
    - Base the design of continuous simulation modeling
  - Water quality to date has gone largely uncontrolled with current urban drainage design and practices in Lincoln
  - The majority of rainfall events in Lincoln are smaller rainfall events that carry the majority of pollutants that adversely impact local streams and lakes
- Presentation of water quality standards
  - Lincoln has existing voluntary water quality standards as listed in the 2005 Stevens Creek Watershed Master Plan in Section 7
  - Controlling the water quality event will not only help in reducing pollutant loads to local streams and lakes, but will can significantly reduce stream bank stabilization issues
  - Controlling water quality can be accomplished through the augmented use of existing standard practices for flood control (i.e. detention/retention structures), and also through the use of alternate Best Management Practices such as pervious pavement, bio-swales, rain gardens, etc
  - The City of Lincoln has existing documentation and projects for Best Management Practices
  - A proposed ordinance for water quality standards (i.e. post-construction standards) would be in Chapter 28, which is the chapter on Stormwater Quality and erosion and Sediment Control and would probably include sections on provisions, definitions, procedures, design criteria, maintenance and enforcement
  - Major issues that would be covered by the ordinance would include:
    - Water quality standards applicable to what type of developments
    - Standards applicable at what date
    - Exceptions
    - Criteria
    - Maintenance/Sureties
    - Enforcement

Comments, Reflections, Thoughts and Questions from Small Group Discussions

- 1: What water quality benefits resulting from requiring stormwater quality practices do you believe will be valued by the community?
  - Reduction in runoff
  - Long-term benefit to reduce pollution
  - Beauty
  - Economic benefit
  - Public health benefit – reduces toxins entering water
  - Reduction of contaminants in waterways
  - Clean lakes
  - Monitoring of Salt Creek
  - Removal of sediment
  - Enhanced reputation
  - Reduce potential for flooding
  - Water quality
  - Visual benefit / aesthetically pleasing
  - Erosion control
  - Avoiding Federal penalties
  - Concern that none of this matters to the general public except the beauty/aesthetics
  - Concern that water quality is under-appreciated
  - Concern about community response
  - Concern that there is no recognition of the pollution problem from storm water
    - *Note: The City of Lincoln, Watershed Management Division has been doing annual surveys (approximately 300/year) at the February Home and Garden show for several years. The surveys show a significant increase from the public in the general understanding that stormwater runoff is a source of pollution to our local streams and lakes. For example:*
      - *96% of those surveyed in 2012 stated that they were aware that dumping oil, grass and leaves, pet waste and trash into a storm drain is illegal. As a comparison in 2007, 59% of the respondents thought these practices were legal*
      - *91% of those surveyed 2012 were aware that runoff from yards flow untreated into streams and lakes. As a comparison in 2007, 70% acknowledged that storm drains are directly connected to streams and lakes*
      - *In 2012, 70% of those surveyed have seen and taken notice of billboards related to stormwater waster as compared to 45% in 2009*
    - *The survey also provided some measurement of behavorial changes. However the survey results indicate no significant behavorial changes to date related to stormwater practices by the public including increased picking up of dog waste, increased soil tests prior to fertilizing, or decreasing fertilization of lawns*

- 2: What concerns might the community have about requiring stormwater quality practices?
  - What will it cost
  - Who will pay for it
  - Don't understand the need
  - Will pests (bugs, animals) use as a home

- Limited knowledge/appreciation of benefits from costs
- Who should be required – developer vs. residential
- Will there be exemptions – e.g., UNL, LPS, State
- Need for level playing field for private sector
- Education leap
- Cost of maintenance – put practices in place that are viable over the long-term
- Is there the expertise for maintenance

- 3: What additional information, if any, do you need to have an informed discussion of stormwater quality programs and/or ordinances?
  - What are the pollutants in the First Flush? Are standards for this different in residential vs commercial?
  - What are the contaminants that we are trying to deal with?
  - What solids are we concerned about collecting?
  - What do the studies say about collecting solids?
  - What does success look like?
    - Desire to avoid huge fines
    - Community concerns and Government entities: are they held to same standards?
  - Do rules apply to all, e.g., nonprofits, schools, etc.?
  - Need for cost/benefit analysis to address public concerns
  - Transfer development rights
  - Do we have the expertise for designing, building, and maintaining?
  - How will the aesthetics be maintained long-term?
  - What is the value to the overall community?
  - Who is sharing the cost?
  - Create incentives – performance standards, transfer of development rights
  - Is the treatment of our water resource as high a priority as it needs to be compared to our other resources?
  - Will there be exemptions?
    - *Note: Most if not all of the above questions will be addressed in the upcoming third task force meeting or within upcoming technical memos including one on Costs and one on Water Quality Pollutants*

Best Management Practice (BMP) Presentation

- Presentation by Ted Hartsig and Carter Hubbard from Olsson Associates
- This presentation (The Application of Stormwater Best Management Practices in Lincoln) is available on the Task Force website
  - Why Best Management Practices (BMPs)?
    - Reduced stormwater runoff volume
    - Improved water quality
    - Reduced landscape maintenance
    - Stream stability
    - Reduced infrastructure cost downstream
    - They're practical
    - They're aesthetic amenities in the community
    - Reduce demands on Public Works
    - Changes to existing practices are minimal

        - The best way to mitigate stormwater impacts from new developments is to use practices to treat, store, and infiltrate runoff onsite before it can affect water bodies downstream (reference: EPA)
    - Structural BMPs include storage practices such as:
        - Rain gardens and bioretention gardens
        - Wet ponds and extended-detention basins
        - Filtration practices such as grassed or vegetated swales, and filter strips
        - Pervious pavements
        - Silva cells
        - Green roofs
    - BMPs in Lincoln
        - 27th and F Street
        - Aspen Greens Common Area
        - Norris Lane and Allen Road
        - Havelock Rain Garden
        - Lewis Ballfields Parking Lot
        - Capital Parkway and J Street
        - Peterson Park Wetland
        - Pine Lake Heights
        - 56th Street and Old Cheney Road
        - Tierra Park
        - Lower Platte South NRD Office
    - Federal Requirements
        - Phase I and Phase II communities must develop, implement, and enforce a program to address stormwater runoff
            - New development
            - Redevelopment projects
            - Structural and non structural controls
        - Any program must ensure that controls are in place that would prevent or minimize water quality impacts.
    - State Requirements, mirror Federal requirements, including
        - 1. Public Education and Outreach
        - 2. Public Participation and Involvement
        - 3. Illicit Discharge Detection and Elimination
        - 4. Construction Site Runoff Control
        - 5. Post Construction Runoff Control
        - 6. Pollution Prevention and Good Housekeeping
        - 7. Industrial and Related Facilities
        - 8. Monitoring Program
    - Concept of Sustainable Design, community planning and design that:
        - Integrates sustainable, natural environment to
            - Reduce water consumption
            - Improve water quality
            - Reduce energy use
        - Native landscapes balance function with aesthetic
        - Reduces long-term costs for operations and maintenance
        - Sustainable Design Benefits

- High aesthetic value -- seasonal changes, diverse foliage, flower and fruit, healthy plants, year-round interest, wildlife
- Sustainable Design Benefits
  - Easy on the environment -- reduced pesticides, fertilizers, water use, habitat enhancement
  - Sustainable Design Benefits
  - Potential for cost savings -- less maintenance, healthier plants, reduced resource inputs
- Effective stormwater management requires integrated management of water, vegetation, and soil
  - The Wisdom of Native Plants
    - Adapted to this region
    - Water and nutrient stingy
    - Deep roots
    - Beautiful leaves and flowers
  - The Health of Soil
    - Key to the health of plants
    - Storage of water, nutrients
    - Filtering/cleansing pollutants
    - Base support of vegetation
  - Managing Water
    - Capturing and filtering stormwater
    - Conserving water deep in the soil
    - Reducing volume discharged to streams
    - Reduced erosion and property destruction
- BMP Costs
  - Costs for Stormwater BMPs vary
    - Type of BMP
    - Size and structure
    - Amount of stormwater captured and treated
  - Cost is less when design and construction is part of the planning process
  - BMPs integrated into community design reduce infrastructure needs and reduce costs
  - Cost is more for retrofitting into existing landscapes
  - Costs will come down as BMPs become more common, and as design standards are developed and implemented
- Benefits
  - Increased land values – people enjoy natural amenities
  - Sale-ability of land – neighborhoods with BMPs and Low Impact Development concepts have been shown to sell quicker than conventional neighborhoods
- BMP Maintenance
  - BMP maintenance is highest after installation and during the first year
  - Maintenance requirements diminish during second year, and beyond
  - Minimal or no need for fertilizers, pesticides, water
  - Maintenance cost about 10% of construction during first year, about 2% to 3% of construction cost during subsequent years

Parking Lot:

No new items

Next Task Force Meeting is March 20th, 2012 at the NRD from 11:30 a.m. to 1:30 p.m.

The group memory was presented to the Clean Water Program Task Force members in an e-mail on 3-15-12 as a draft and at the March 20th Task Force meeting in hard copy and no additions, corrections, or revisions have been received by The Mediation Center as of 3-21-12

Thank You,

Lorrie Benson & David Hubbard
The Mediation Center
610 "J" Street, Suite 100
Lincoln, Nebraska 68508
Main 402-441-5740
Direct 402-441-5746
Fax 402-441-5749
dhubbard@themediationcenter.org

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