

PUBLIC WORKS COUNCIL

August 20, 2020

1. Welcome and Introductions

ACTION ITEMS

2. Meeting Summary

- The May 7th Draft Summary is available for review.
- The Public Works Council will vote to approve the summary.

3. Public Works Council Nominations (Subregions)

Seat	Name	Title	City
Denton/Lake Cities Subregion	George Marshall	City Engineer	City of Corinth
East Subregion	Vacant		
Mid-Cities Subregion	Caroline Waggoner	City Engineer	City of North Richland Hills
Northeast Subregion	Andrew Figueroa	Director of Public Works	City of Celina
	Stanton Forester	Public Works Director/City Engineer	City of Lucas
Southeast Dallas Subregion	Fabrice Kabona	Assistant City Manager	City of Lancaster
	Charles Brewer	Director of Public Works	City of Hutchins
	Brooks Williams	City Manager	City of Ferris
Southwest Subregion	Jeremy Hutt	Director of Public Works	City of Cleburne
Southwest Dallas Subregion	Bryan Ramey	Director of Public Works	City of Duncanville
West Subregion	Manny Palacios	Transportation and Public Works Director	City of Weatherford

3. Public Works Council Nominations (Standing)

Seat	Name	Title
Arlington	Christopher Funches	Civil Engineer
Carrollton	Jody Byerly	Director of Public Works
Dallas	Haytham Hassen	Senior Program Manager
Denton	Pritam Deshmukh	Deputy Director of Water/Wastewater Utilities
Fort Worth	Juan Cadena	Transportation and Public Works Senior Capital Projects Officer
Frisco	Dan Franke	ROW Manager, Senior Civil Engineer
Garland	Michael Polocek	Director of Engineering
Irving	Dave Springob	Engineering Manager
McKinney	Paul Sparkman	Assistant Director of Public Works
Collin County	Mark Hines	Assistant Director of Public Works
Dallas County	Cecelia Rutherford	Public Works Senior Program Manager
Denton County	Fred Ehler	Public Works Director

3. Public Works Council Nominations (Private)

Seat	Name	Title	Company
TCEL/GeoProfessionals Serving Texas	Lyndon Cox	Senior Principal	Terracon Consultants, Inc.

4. Public Works Council Chair and Vice Chair

- The Public Works Council will vote on a Chair and Vice-Chair for FY21.

Position	Name	Title	City
Chair	Keith Marvin	Director of Public Services	City of Lewisville
Vice Chair	Shawn Poe	Director of Engineering	City of Richardson

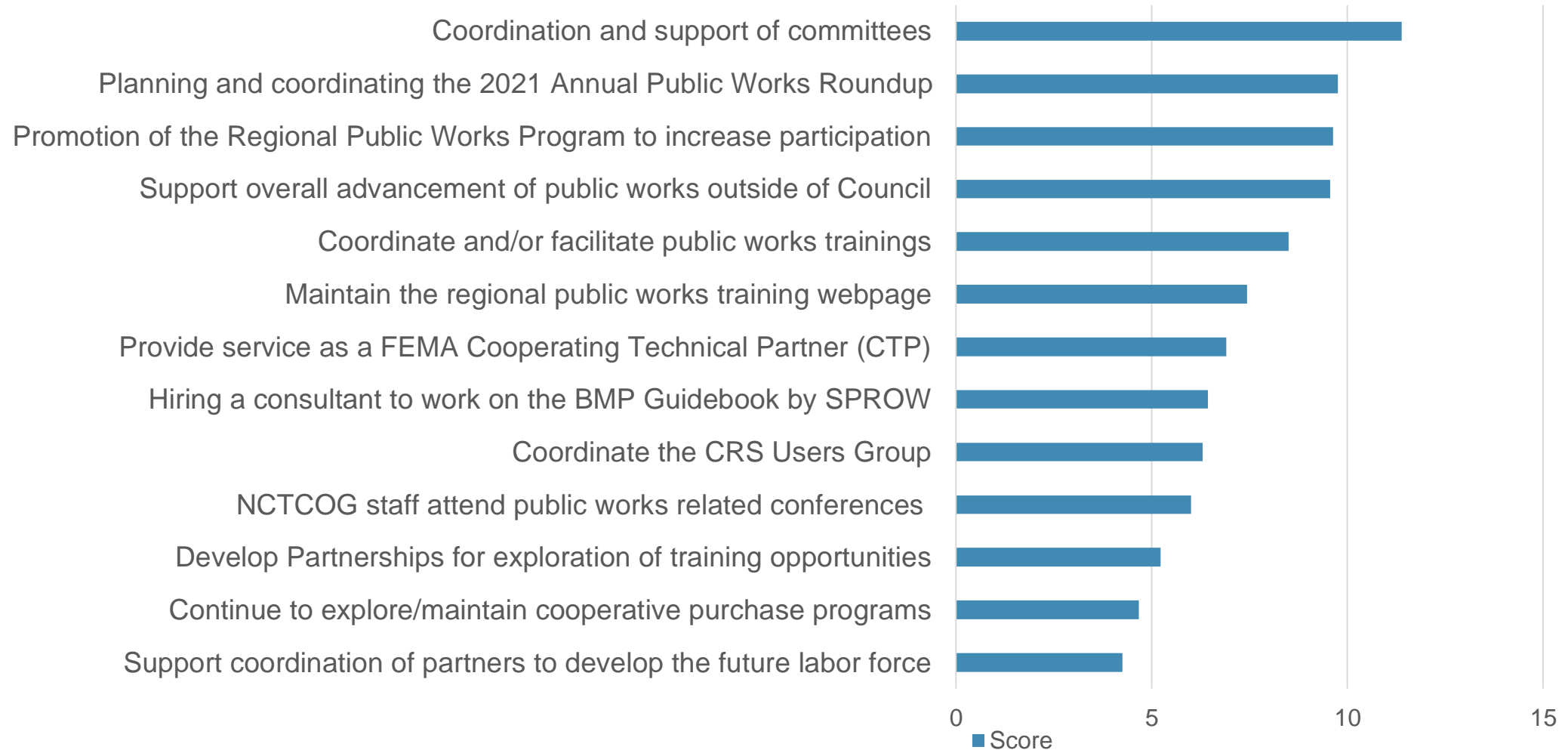
5. Public Works FY21 Work Program

The [Draft Work Program](#) is available for review.

- The FY21 Work Program Prioritization survey was sent out after the May meeting.
- There were 10 responses to the survey.
- All activities will stay in the FY21 Work Program and high priority activities will be focused on until cost-shares are received.

5. Public Works FY21 Work Program

Prioritized FY21 Work Program Activities



5. Public Works FY21 Work Program

Prioritization Survey

2) Do you want to continue the New Inspector Training and Construction Contracts Workshop or are there other topics you would like training on?

- Yes - all other construction and pavement management related topic
- I am new to this committee and not aware of most of its programs
- no
- Yes. Can't think of any other topics
- continue
- Yes, continue the program

3) Additional comments on the Work Program:

- Keep up the excellent work during these unprecedented times!
- none

5. Public Works FY21 Work Program

Prioritization Survey

4) What specific budget related impacts will you and others at your organization be faced with as it relates to participation in the Regional Public Works Program and/or Public Works Council and subcommittees? (ex. attendance at meetings, attending trainings, participation in subcommittee activities, etc.)

- At this time, small impacts are to the budget are occurring but shouldn't impact the ability to cover the City share for the PWC.
- Attendance and sponsorship may be limited for virtual programs
- varies depending on schedules for attendance for meetings and trainings
- none
- I anticipate the PW Department will continue to participate as previously identified. There could be fewer folks participating in training efforts due to funding shortfalls.

5. Public Works FY21 Work Program

- The Public Works Council will vote to approve the [Draft Work Program.](#)

DISCUSSION ITEMS

6. iSWM 5-Year Outreach and Implementation Strategy

OVERVIEW OF THE ISWM PROGRAM

HOW WAS ISWM CREATED?

The iSWM program was developed in response to:

- The need to address regulatory requirements and,
- Concern of outdated storm water management standards.

Developed by Technical Review Committee:

- Representatives from municipalities & other government agencies
- Consultant Team = Local, Regional, National experts
- NCTCOG staff

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Design Manuals endorsed by NCTCOG:

- iSWM Technical Manual Documents (2014) - <http://iswm.nctcog.org/technical-manual.html>
 - Construction Manual - 2003
- Criteria Manual with TriSWM appendix (2015) - <http://iswm.nctcog.org/criteria-manual.html>
 - Site Development Manual - 2006

ISWM PROGRAM PROGRESS – PAST

- 2009
 - NCTCOG engaged the services of a professional engineering consultant (Freese and Nichols) to assist in the process of developing revised (2nd) editions of the iSWM Manuals.
- 2012-2013
 - Interviews with prospective local governments were conducted to see what barriers were discouraging communities from formally adopting the program.
- 2014
 - Created the new itemized outcomes (22 prioritized things) and certification process.
- 2015 – 2016
 - Focus on education and training workshops that addressed the benefits of the program impacts in the community and common problems and complaints when applying iSWM.

THE ISWM PROGRAM'S PROGRESS – CURRENT

- 2017-2018:
 - Halff was selected as the new engineering consultant and was tasked with develop training materials and conduct periodic training sessions, prepare implementation guidance, provide technical assistance as the need arises, and updates to the iSWM Manuals
- 2019 – 2020
 - Technical Assistance (community meetings, presentations, etc.) - City of Sanger, City of Celina, City of Corinth, DFW Airport, Lewisville, and Dallas County
 - Community Inventory - <http://iswm.nctcog.org/participating-cities.html>
 - Training and presentations– <http://iswm.nctcog.org/training.html>
 - Technical document reviews and recommendations

ISWM COMMUNITIES

The cities of Azle, Benbrook, Duncanville, Fort Worth, Glenn Heights, Hurst, Grand Prairie, Lakeside, Mansfield, Northlake, Roanoke, Southlake, and University Park have officially adopted and implemented the iSWM Program.

Since 2016 the program has designated **six** communities as certified iSWM communities (**Silver**).

- Denton - 2016
- Frisco - 2016
- Fort Worth - 2017
- Grand Prairie - 2017
- Kennedale – 2017
- Irving – 2018

In 2020 we received new applications

- The City of Corinth
- The City of Celina

ISWM 5-YEAR IMPLEMENTATION AND OUTREACH PLAN

ISWM 5-YEAR OUTREACH PLAN

GOALS

- Increase awareness and adoption of iSWM program, certification, and iSWM principals.
- Identify key levels of city management and regional organizations that need to be engaged and with what level of frequency.
- Refine the vision and messaging plan to be implemented over the next 5 years.

ISWM 5-YEAR OUTREACH PLAN

CURRENT TASK ORDER PLAN

- **Step 1** - Engage PWC on feedback regarding this effort
- **Step 2** - Engage local stormwater professionals and floodplain administrators through surveys, interviews
- **Step 3** - Work with NCTCOG and iSWM Subcommittee to develop strategies, frequency, and topics for future engagement to accomplish goals.
- **Step 4** - Submit 5-year plan to PWC for final review.
- **Step 5** - Provide strategy document to define final vision of the 5-year plan including objectives, key entities for engagement, frequency, and implementation strategies to meet the goals of the 5-year plan.

IMPLEMENTATION STRATEGIES

DATA GATHERING

- Interviews with current iSWM users for feedback
- Develop new case studies for program

EVALUATION STRATEGIES

- Identify sensitive corridors and goals to improve water quality, habitat, etc.
- identify areas to concentrate natural drainage retrofits to support overtaxed stormwater pipes

POTENTIAL OUTREACH IDEAS

- Target Areas – Community, City staff/elected officials, and Developers/engineers
- Training and iSWM certification
- Signage at construction sites
- iSWM award
- Partnerships with education institutions, non-profits, cultural institutions, and healthy river and stream outreach groups

**Q & A WITH
PUBLIC WORKS COUNCIL**

Q & A WITH PUBLIC WORKS COUNCIL

The purpose of iSWM is to help communities throughout the metroplex

- Meet construction and post-construction obligations under state stormwater permits.
- Achieve water quality, streambank protection, and flood mitigation goals by providing guidance for development and redevelopment

Question 1:

HOW COULD THE ISWM PROGRAM BE IMPROVED TO BETTER MEET THESE GOALS IN THE FUTURE?

- Please feel free to unmute yourself to answer or answer in comment box

Q & A WITH PUBLIC WORKS COUNCIL

Question 2:

WHAT IMPORTANT OUTCOMES WILL INDICATE THE SUCCESS OF THE ISWM PROGRAM TO THE PWC?

- i.e. increased participation, more certified communities, training, etc.
- Please respond on the phone or in the comment box

Q & A WITH PUBLIC WORKS COUNCIL

Question 3:

WHO COULD BE THE MOST IMPACTFUL AMBASSADORS OF THE ISWM PROGRAM:

- Citizens
- City staff
- Elected officials
- Private sector companies or individuals
- Organizations
- Other

Q & A WITH PUBLIC WORKS COUNCIL

Question 4:

CONSENSUS: ARE WE HEADED IN THE RIGHT DIRECTION WITH THE STRATEGIES WE'VE DISCUSSED?

- Yes - sounds great
- Not yet - we need more discussion somehow

Q & A WITH PUBLIC WORKS COUNCIL

Question 5:

IS THERE ANYTHING ISWM COULD BE DOING OR ROLES ISWM COULD PIVOT TO FILL THAT HAVE NOT BEEN ADDRESSED YET?

■ Please respond on the phone or in the comment box

NEXT STEPS & FINAL COMMENTS

	2020					2021					
	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April
Engage local floodplain administrators through surveys, interviews	█	█	█	█	█						
Lead 1 - 2 hour training on engineering design and/or maintenance of BMPs					█						
Coordination with NCTCOG and iSWM Implementation Subcommittee			█	█	█	█	█				
Submit 5-year plan to PWC for final review.									█		
Develop strategy document to define final vision						█	█	█	█	█	

INFORMATION ITEMS

7. FY 2020 Public Works Work Program Update

FY 2020 Public Works – Cost Share

We have \$392,250 out of our \$360,000 budget (109%)

Regional Public Works FY20 Cost-Share Participants

- Allen
- Arlington
- Annetta
- Azle
- Benbrook
- Carrollton
- Cedar Hill
- Celina
- Cleburne
- Colleyville
- Coppell
- Corinth
- City of Dallas
- City of Denton
- Duncanville
- Edgecliff Village
- Ennis
- Euless
- Everman
- Fairview
- Ferris
- Forest Hill
- Forney
- Fort Worth
- Garland
- Grand Prairie
- Grapevine
- Haltom City
- Highland Village
- Hurst
- Irving
- Joshua
- Keller
- Kennedale
- Lancaster
- Lewisville
- Mansfield
- McKinney
- Mesquite
- Murphy
- Plano
- Red Oak
- Richardson
- Rockwall
- Rowlett
- Seagoville
- University Park
- Watauga
- Waxahachie
- Weatherford
- Westlake
- Wylie
- Collin County
- Dallas County
- Denton County
- Johnson County
- Tarrant County
- Dallas County Council of Engineers

Public Works Program Events

Public Works Roundup

- Sept 17th 9am-4pm through the virtual meeting platform Hopin.
- Registration opened on Aug 17th at <https://hopin.to/events/public-works-roundup>.
- There will be a SPROW track in the afternoon.

Construction Contracts Training

- September 22nd 10am-12pm virtually
- Instructed by Tim James with Halff Associates

New Inspector Training

- September 22nd 1:30pm-3:30pm virtually
- Instructed by Tim James with Halff Associates

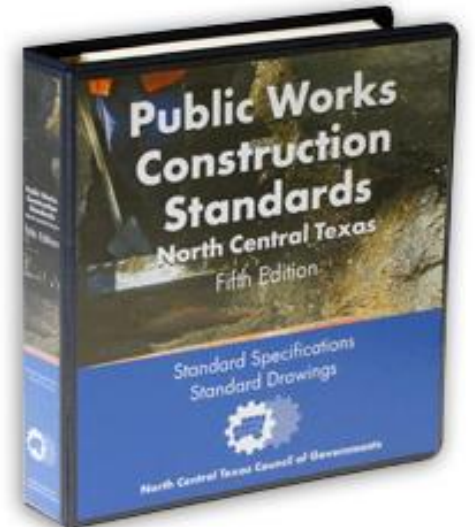
Standard Drawings Subcommittee

Presented by Keith Marvin

- The Subcommittee has completed review of *Division 1000: Erosion and Sediment Control* and *Division 3000: General Underground Conduit*.
- Halff is updating drawings 6020 and 6030 from *Division 6000: Storm Water Drainage* with the Subcommittee's changes.
- The Subcommittee is reviewing *Division 4000: Water Distribution* and is looking for more experts to help comment the details.

Next Meeting

September 21, 2020 at 10 am
Microsoft Teams



Sustainable Public Rights of Way (SPROW)

Presented by Robert Woodbury

- The Subcommittee met Aug 18, 2020 and discussed landscape planning and vegetation maintenance with a variety of professions.
- The Subcommittee is creating a tree matrix that will list trees and their attributes like crown spread, max tree height, avg. life span, etc. to help cities make informed decisions.
- They will also create a similar list for shrubs and other vegetation.

Next Meeting

Oct. 20, 2020 at 1:30pm

Microsoft Teams



Integrated Stormwater Management (iSWM)

Presented by Ranjan Muttiah



Previous Meeting: April 27, 2020

Task Order 4 - May 1, 2020 - April 30, 2021

Task 2: Reorganize/Re-evaluate Site Development →

Controls

- *Develop cover pages for each of the primary water quality stormwater controls.*

Task 3: Guidance on developing a regional detention program

Task 4: Detention criteria guidance research



Bioretention

Description

Bioretention facilities, sometimes called rain gardens or bioretention filters, are vegetated basins or landscaped areas that capture stormwater runoff and provide filtration and treatment using engineered filter media. Bioretention areas are flexible per the needs of most site locations.

Design Considerations

- Consists of a grass filter, a sand bed, stormwater ponding area, an organic/mulch layer, planting soil, and selected landscaping for vegetation
- The facility works on any soil group
- Can be designed with an underdrain to send treated water into an outlet
- Use native plants as recommended
- Can be designed in-line or off-line
- Requires a footprint of 5-7% of the tributary impervious area

Key Advantages

- They are highly effective at removing pollutants and reducing peak flow storm events for small storms
- Bioretention areas work well in areas with a small drainage area (recommended for between 2 and 5 acres)
- Bioretention facilities can handle large amounts of impervious areas
- Bioretention areas have relatively low maintenance requirements
- Due to their incorporation of landscaping, bioretention facilities can be used as an aesthetic feature

Limitations

- Landscaping of bioretention facilities in public areas must be maintained to prevent overgrowth
- Bioretention areas cannot be used in areas with steep slopes
- Bioretention areas are not designed to manage peak flows from large storm events



Bioretention Facility in San Antonio, TX. Source: Tetra Tech

Target Constituent	Removal Rate
Total Suspended Solids	~85%
Total Phosphorus	~65%
Total Nitrogen	~45%
Fecal Coliform	Insufficient data
Heavy Metals	~55%

Implementation Considerations



Suitability

The iSWM manual has designatized that bioretention facilities are suitable for providing:



Water Quality Protection



Streambank Protection*



On-site Flood Control*

*In certain situations

Maintenance

- Trash, leaf, debris and sediment removal
- Weeding/removing unwanted vegetation
- Replacing dead and dying vegetation
- Raking and replacing the top mulch layer
- Irrigating plants after planting and during the dry season
- Replace soil media on an as-needed basis
- Clean inlet and outlet pipes when required
- Repair eroded locations

Integrated Stormwater Management (iSWM)

Presented by Ranjan Muttiah



Task 5: Re-evaluate 85th Percentile (1.5”) Rainfall Requirements

Task 6: 5-Year Outreach and Implementation Strategy (High priority)

Task 7: Provide details and specifications for water quality BMPs

- *Provide details and specifications for up to 5 water quality, filtration, and infiltration BMPs from the Site Development Controls.*

Next Meeting: Wednesday, October 7, 2020, at 1:30 pm

8. Other Program Activities

- **Cooperative Technical Partnership (CTP) Program**

- **FY17 Projects**

- Flood Resilience meetings complete for Town Creek and Stream CF-5; projects will close out this fall.
- Richland-Chambers Watersheds Post-Discovery Webinar was held April 2nd. The recording and Draft Discovery Report can be found here: <https://www.nctcog.org/envir/watershed-management/cooperating-technical-partners/discovery>. This project will close out this fall.

- **FY18 Projects**

- Flood Risk ID on Marys Creek in Parker County is 70% complete. The flood risk review virtual meeting will be scheduled late this summer.

- **FY19 Projects**

- Harriet Creek (Denton County, 7 miles) and Waxahachie Creek (Ellis County, Midlothian, Waxahachie; 19 miles) flood risk identification projects kicked off in April and are ongoing.

- **FY20 Projects**

- NCTCOG received awards for flood risk identification on Catherine Branch (Denton County) and communications and outreach to the northern/western area of the region for integration of transportation and stormwater planning.

8. Other Program Activities

- **Community Rating System Users Group**

The annual Combined CRS Users Group and Elected Officials Floodplain Seminar was held Thursday, July 30th from 1:00 p.m. to 4:00 p.m. with speakers from the Texas Water Development Board. View the presentation on our [website](#). The topics were:

- Overview of Flood Activities and New Initiatives
- Flood Mitigation Assistance
- Floodplain Management and NFIP Outreach
- Flood Mapping and Base Level Engineering
- Flood Planning

The next meeting is pending. What would you like to see in the next North Central Texas Floodplain Administrators/CRS Users Group Meeting? Email Mia Brown at mbbrown@nctcog.org.

www.nctcog.org/envir

8. Other Program Activities

Public Works Emergency Response Team (PWERT) Update

Contact Information:

Manny Palacios
Chair

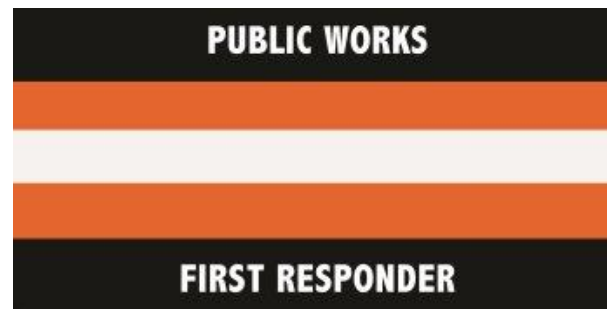
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Ed Balderas
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Donna Jackson
NCTCOG Rep

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8. Other Program Activities

Texas Chapter of American Public Works Association

- TX Chapter Board voted to have one conference in 2021 on May 17-19 in Galveston rather than two events (Public Workshop and Annual Conference)
- Current plan is to have an exhibit at TML in Grapevine October 14-16, 2020 but TX Chapter Board meeting will be virtual. TML will be deciding on format of conference by August 7th.
- North Central Branch held a virtual meeting on August 5th. The topic was how the COVID pandemic has effected municipal government operations.
- North Central Branch Golf Tournament is still planned for October 5th
- North Central Branch One Day Seminar is planned for November 19th

OTHER BUSINESS AND ROUNDTABLE DISCUSSION

9. Future Agenda Items

10. Roundtable Topics/Other Business

NOW, IT'S YOUR TURN...

11. Next Public Works Council Meeting

The next PWC meeting is scheduled for:

Thursday, November 12, 2020

9:30 a.m. – 11:30 a.m.

WebEx

Public Works Staff

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