SUMMARY OF THE DREDGED MATERIAL MANAGEMENT PROGRAM
INNOVATIVE REUSE COMMITTEE MEETING
February 25, 2020, 5:30 PM
Point Breeze Business Center
2200 Broening Highway
Baltimore, Maryland 21224

Attendees:

Innovative Reuse Committee (IRC) Members:
Baltimore County Department of Environmental Protection and Sustainability (EPS): David Riter
Baltimore Port Alliance (BPA): Rupert Denney
Maryland Department of Commerce: Wade Haerle
Maryland Department of the Environment (MDE): Matt Rowe
Maryland Department of Transportation The Secretary’s Office (MDOT TSO): Eddie Lukemire
Maryland Department of Transportation State Highway Administration (MDOT SHA): Darren Swift
Stancills, Inc.: Chris Siciliano
Tradepoint Atlantic: Pete Haid
Turner Station Conservation Teams (TSCT): Larry Bannerman
United States Army Corps of Engineers, North Atlantic Division, Baltimore District (CENAB): Kevin Brennan

IRC Support Staff and Observers:
Facilitator: Steve Pattison
Alliance for the Chesapeake Bay: Abbi Huntzinger
Anchor QEA: Mark Reemts
EA Engineering, Science, and Technology, Inc.: Chris Overcash
Maryland Department of Transportation Maryland Port Administration (MDOT MPA): Dave Blazer,
Katrina Jones, Kristen Keene, Holly Miller
Maryland Environmental Service (MES): Jeff Halka, Dallas Henson, Benjamin Langer
Northgate Environmental Management (NGEM): Steve Bedosky
Terracon: Nancy Straub
University of Maryland Center of Environmental Science (UMCES): Elizabeth Price

Action Items:
1. Ms. Keene requested the Committee review and provide any comments on the draft final 2014 Innovative and Beneficial Use Strategy lessons learned document.

Welcome & Introductions
Steve Pattison, Facilitator
Mr. Pattison welcomed the meeting attendees and asked the attendees to introduce themselves.

Mr. Pattison stated that the action items from the November 26, 2019 Innovative Reuse Committee (IRC) meeting were completed and requested comments on the November IRC meeting summary. The Committee did not raise any comments and accepted the November IRC meeting summary as final.
Maryland Department of the Environment (MDE)  
Matt Rowe, MDE  

Innovative Reuse and Beneficial Use Guidance Document Update  
Mr. Rowe discussed updates to the MDE Innovative Reuse and Beneficial Use of Dredged Material Guidance Document (Guidance Document), which is available on the MDE website: https://mde.state.md.us/programs/Marylander/Pages/dredging.aspx.

Management and Regulation of Processing Operations  
MDE has updated the Guidance Document to include the management and regulation of processing operations, which are facilities for drying and/or blending dredged material. Mr. Rowe stated that this update is provided in Section III D3 of the Guidance Document and covers permitting and monitoring requirements for stormwater discharges associated with dredged material processing operations depending on the material’s categorization. Mr. Rowe stated that Category 1 material, which can be used for residential end uses, and Category 2 material, which can be used for non-residential end uses, would likely be regulated under a general permit for stormwater discharges associated with industrial activity. Material within MDE Category 3 and 4 would be regulated under an individual industrial stormwater discharge permit, including site-specific requirements. Mr. Rowe added that a facility that has no exposure of potential pollutants to stormwater, such as blending operations conducted under a roof, may file a No Exposure Certification with MDE.

Mr. Rowe stated that the monitoring requirements for dredged material processing operations under a general permit for stormwater discharges associated with industrial activity include quarterly stormwater runoff monitoring and reporting for certain metals and nutrients. Mr. Rowe added that MDE may require other applicable permits if the dredged material is mixed with other regulated materials.

Reuse of Dredged Material on Agricultural Lands  
MDE, in coordination with the Maryland Department of Agriculture (MDA), updated the Guidance Document to include the reuse of dredged material on agricultural lands, provided in Section IV B3. This update was developed based on requests from the U.S. National Park Service (NPS) regarding the reuse of dredged material from the Chesapeake and Ohio (C&O) Canal on agricultural land. Mr. Rowe noted that MDA and MDE agreed that dredged material can be used on agricultural lands as long as it does not exceed the Category 1 screening levels, is placed on agricultural lands that have a nutrient management plan, and the dredged material application does not exceed the nutrient management plan.

MDE can assist farmers interested in reusing dredged material on agricultural lands, including assisting in developing a sediment sampling and analysis program to properly characterize the material prior to placement. Additionally, if certain parameters exceed Category 1 screening levels, the material may still be used on agricultural land if it is consistent with on-site materials.

Mr. Rowe stated that MDE and MDA recommend monitoring the applied dredged material for nitrogen, phosphorous, and potassium concentrations so as not to exceed the site’s nutrient management plan. Additionally, to determine if applying dredged material will improve or impair the agricultural soil’s physical characteristics, a grain size analysis is recommended.

Dredged material placed on agricultural lands in groundwater use areas will be evaluated on a case-by-case basis and may be subject to additional evaluations and environmental measures to ensure placement does not adversely impact groundwater or surface water resources. Mr. Rowe added that entities interested in
using dredged material on agricultural lands should determine if any local ordinances or agricultural preservation/easement requirements may restrict the reuse of dredged material.

Mr. Haid asked if NPS successfully reused dredged material on agricultural land. Mr. Rowe responded that MDE provided NPS with the requirements for dredged material reuse but has yet to receive any additional communications. Mr. Denney asked if the nutrient management plan required for dredged material reuse on agricultural lands was an added burden to farmers. Mr. Rowe responded that nutrient management plans are already required for all agricultural lands.

2014 Innovative and Beneficial Use Strategy – Lessons Learned

Ms. Keene provided definitions for innovative reuse and beneficial use. Innovative reuse includes the use of dredged material in the development or manufacturing of commercial, industrial, horticultural, agricultural or other products. Beneficial use is the in-water application of dredged material in a manner that does not constitute open-water placement. In Maryland, the five specific ways that dredged material can be beneficially used in water include: “(i) the restoration of underwater grasses; (ii) the restoration of islands; (iii) the stabilization of eroding shorelines; (iv) the creation or restoration of wetlands; and (v) the creation, restoration, or enhancement of fish or shellfish habitats.”

Ms. Keene provided an overview of the 2014 Innovative and Beneficial Use Strategy action items. Maryland Department of Transportation Maryland Port Administration (MDOT MPA) was able to complete or advance a majority of the 2014 action items through interagency coordination, the hard work of the MDOT MPA Innovative Reuse team, guidance from the IRC, and stakeholder input.

The lessons learned document for the 2014 Innovative and Beneficial Use Strategy is divided into four categories: policy/regulatory, technical, education/outreach, and program implementation.

Policy/Regulatory

Interagency Regulatory Workgroup

Ms. Keene stated that the Innovative and Beneficial Use Interagency Regulatory Workgroup (Workgroup) performed a tremendous amount of work and paved the way for providing a regulatory framework to reuse dredged material safely in Maryland.

MDE Guidance Document

MDE developed the Guidance Document with the Workgroup’s input and assistance. This document provides a regulatory framework outlining the necessary MDE approvals for safely reusing dredged material.

Technical

Sediment Quality Database

Ms. Keene stated that the Sediment Quality Database is a knowledgebase for MDOT MPA that is used to collect data on the quality and categorization of dredged material within Maryland’s navigation channels, dredged material containment facilities (DMCFs), and dewatered stockpiles. This data is shared among agencies, the private sector, academia, and advocacy groups to further the innovative reuse and beneficial use of dredged material.
Research and Development Request for Proposals (RFP)
In November 2019, MDOT MPA advertised the Innovative Reuse and Beneficial Use of Dredged Material: Research and Development for Dredged Material End Use Applications Request for Proposals (RFP). Ms. Keene stated that part of the impetus for developing this RFP was the overwhelming feedback from stakeholders and the private sector regarding concepts for novel dredged material end use applications. The RFP will help MDOT MPA continue to diversify the portfolio of end use applications.

Education/Outreach
Diversity of Outreach Materials
Ms. Keene noted that previous MDOT MPA outreach efforts focused on communities, stakeholders, and Dredged Material Management Program (DMMP) committees. Due to the uniqueness of the Innovative Reuse Program, MDOT MPA identified and defined varied audiences for outreach and engagement purposes and appropriately adapted levels of outreach materials based on the audience need. MDOT MPA successfully developed an outreach and education program for Innovative Reuse and continues to utilize a diversity of innovative reuse and beneficial use outreach materials, including video, factsheet, infographic, banners, exhibits, and folders. These materials help further the Innovative Reuse Program and education efforts regarding dredged material to varied audiences.

Stakeholder Communications
MDOT MPA expanded their defined stakeholders to include other agencies, businesses, the private sector, and material groups to increase awareness of dredged material as a resource, its characteristics and importance of innovative and beneficial use as part of the DMMP.

Program Implementation
Interagency Coordination
MDOT MPA has been able to coordinate with many partner agencies, such as MDE, other Transportation Business Units (TBUs) within MDOT, and the Maryland Department of Commerce to further the Innovative Reuse Program.

Demonstration Projects
Ms. Keene stated that the implementation of small-scale demonstration projects has provided MDOT MPA with an increased understanding of the process of reusing dredged material. By coordinating with MDE and utilizing the Guidance Document to characterize dredged material for the demonstration projects, MDOT MPA has been able to utilize structured regulatory pathways that can be followed to implement future end use projects. Conducting demonstration projects also provided information regarding material dewatering efficiency and defining a cost-effective hauling distance.

Ms. Keene requested the Committee review and provide any comments on the draft final 2014 Innovative and Beneficial Use Strategy lessons learned document.

Next Steps
Ms. Keene reviewed next steps associated with development of a revised Innovative Reuse and Beneficial Use Strategy for 2020. Later in this meeting, MDOT MPA will obtain and document feedback from the IRC to develop the draft 2020 Strategy. The draft 2020 Strategy will be presented at the March 25, 2020 DMMP Management Committee meeting for further input. In late March/early April, the draft final 2020 Strategy will be distributed to the IRC and Management Committee members for additional review and comment.
MDOT MPA will present the revised draft final 2020 Strategy at the June 4, 2020 DMMP Executive Committee meeting for approval.

Mr. Haerle inquired about the maximum cost-effective hauling distance for material. Ms. Keene responded that, to date, MDOT MPA has only used trucks to transport dredged material and the maximum cost-effective hauling distance via trucks is approximately 20 miles. Ms. Keene noted that use of other transportation modes to transport material could be further reviewed during the discussion for revising the Innovative and Beneficial Use Strategy.

**Revising the Innovative and Beneficial Use Strategy – Steve Pattison, Facilitator**

**Discussion**

Mr. Pattison reviewed the questions outlined under the Revising the Innovative and Beneficial Use Strategy Discussion section of the agenda. The questions were developed to focus the discussion, however, Mr. Pattison stated that other ideas to revise the Strategy were sought and should not be limited to fit within the list of questions. The Committee began discussions on revising the Innovative and Beneficial Use Strategy.

*Are there other agencies or private sector groups you feel MDOT MPA should be engaging with?*

Over the 5-year implementation of the 2014 Innovative and Beneficial Use Strategy, MDOT MPA has made substantial efforts to engage with a wide variety of organizations, advocacy groups, state agencies, the private sector, and consulting firms to promote the Innovative Reuse Program. Mr. Pattison asked the Committee for suggestions/recommendations regarding additional agencies or private sector groups that MDOT MPA should engage with.

Mr. Brennan asked if MDOT MPA is exploring the fill material required for the Port Covington project due to sea-level concerns and flooding issues. Ms. Keene responded that the Port Covington project is integrated into the Middle Branch Revitalization Plans and MDOT MPA is currently a member of the Middle Branch Revitalization Working group to coordinate in plan development. On a larger scale, MDOT MPA is interested in how dredged material can be used to address some of Maryland’s coastal resiliency needs, which is a concern at all levels of government, the private sector, community organizations, and other stakeholders. MDOT MPA is interested in engaging with partners in the redevelopment sector and with development corporations for projects.

Ms. Straub recommended that MDOT MPA engage with Maryland, District of Columbia (DC), and Philadelphia Geotechnical Sections of the American Society of Civil Engineers (ASCE) as geotechnical engineers are responsible for determining if materials meet project specifications. Ms. Straub is a member of the ASCE and can facilitate meetings between MDOT MPA and the ASCE and recommended that technical/gradation data be brought and discussed at initial meetings with the ASCE.

Mr. Denney asked if MDOT MPA has coordinated on projects with MDA. Ms. Keene responded that the only engagement MDOT MPA and MDA currently has is through the Sustainable Materials Management Maryland (SM³) group, of which MDA is one of the key agencies. Ms. Keene concurred with the suggestion of MDOT MPA engagement with MDA given the recent updates to the Guidance Document for reuse of dredged material on agricultural lands.

Ms. Huntzinger recommended that engagement with agricultural landowners should be conducted through the local Soil Conservation Districts (SCD). The contact information for each county SCD is online and the SCD will have information on which farms have nutrient management plans.
Ms. Huntzinger stated that the Department of Defense (DOD), specifically the U.S. Navy, has extensive low-lying property along the Chesapeake Bay that could tie into coastal resiliency. Ms. Huntzinger can provide contacts for various bases if needed. Ms. Huntzinger stated that four military bases are working with the Alliance for the Chesapeake Bay voluntarily, two of which are not receiving Municipal Separate Storm Sewer System (MS4) stormwater management program credits. Mr. Siciliano asked if the Alliance for the Chesapeake Bay has coordinated with the U.S. Naval Academy. At the July 10, 2019 Environmental Business Leadership Conference, the Commander in charge of the U.S. Naval Academy discussed the necessity to raise low-lying property and the quantity of material needed. Ms. Huntzinger responded that, while the Alliance for the Chesapeake Bay has not formally coordinated with the U.S. Naval Academy, it is known that internal discussions are underway at the U.S. Naval Academy, however a decision has not yet been made if this project will move forward. Mr. Siciliano stated that if the U.S. Naval Academy were to use dredged material in the project, interest in reusing dredged material would greatly increase.

Mr. Brennan stated that Aberdeen Proving Ground (APG) has been in coordination with the United States Army Corps of Engineers (USACE) to determine how to proceed with direct placement of dredged material from nearby channels to improve their low-lying properties. Mr. Brennan can provide contact information.

Ms. Straub recommended that MDOT MPA engage with the County Engineers Association of Maryland (CEAM) and added that she can provide contact information. Ms. Straub also recommended that MDOT MPA engage with the American Council of Engineering Companies (ACEC) and present at their meetings.

Mr. Haerle stated that the Department of Natural Resources (DNR) Maryland Forest Service has discussed using dredged material in forest reclamation.

Mr. Swift suggested that MDOT MPA/MDOT SHA present at the national Transportation Research Board (TRB) annual meetings. Mr. Swift added that 2021 marks the 100th TRB annual meeting.

Mr. Rowe suggested that MDOT MPA consider whether a resiliency or engineering team is needed under the DMMP to align the program structure to efficiently engage with the coastal resiliency and engineering sectors. Mr. Rowe recommended that MDOT MPA engage with non-governmental organizations (NGO) with large shoreline properties such as The Nature Conservancy and land trusts.

The agencies and private sector groups recommended by the Committee for MDOT MPA to provide further dredged material reuse engagement include:

- Aberdeen Proving Ground (APG)
- American Society of Civil Engineers (ASCE)
- American Council of Engineering Companies (ACEC)
- County Engineers Association of Maryland (CEAM)
- County Soil Conservation Districts (SCD) in Maryland
- Maryland Department of Agriculture (MDA)
- Maryland Department of Natural Resources (DNR), Maryland Forest Service
- Non-governmental organizations (NGO)/Land Trusts
- Port Covington
- The Redevelopment Sector
- Transportation Research Board (TRB)
- The U.S. Department of Defense (DOD), U.S. Navy
• The U.S. Naval Academy
• Proposed - DMPP Resiliency/Engineering Committee

Are there existing regulatory barriers or impediments that could be updated to help facilitate dredged material use?

Mr. Pattison asked the Committee, specifically the regulated entities that wish to use dredged material, to identify any hinderances or impediments, such as unclear standards or regulations, regarding the use of dredged material that should be addressed.

Mr. Haid stated that Tradepoint Atlantic, in coordination with MDE, performed preliminary investigations into dredged material reuse opportunities but was unable to proceed due to difficulties associated with drying dredged material, the need to amend dredged material to meet structural fill specifications, and the lack of available dredged material. Mr. Haid added that the use of equivalent material, while not necessarily cheaper, does not need to be dried or amended prior to use. With the additional property MDOT MPA is currently pursuing, MDOT MPA would be able to increase drying efficiency and stockpiling capacity to fulfill larger orders of dredged material. In response to these physical issues with dredged material, Mr. Siciliano stated that Stancills, Inc., as a potential end-user, would also need to process the dredged material prior to use as a feedstock in a sediment blend. This process would lead to a 30% loss of dredged material through shrinkage and screening, while comparable material would require no processing and therefore be less expensive. In order to ameliorate this issue, Mr. Denney suggested formulating an equation to discount the price of dredged material depending on its moisture content. This upfront discount or a possible tax reduction could influence end users to purchase dredged material over other fill options.

Mr. Lukemire suggested developing and incorporating procurement language similar to Executive Order 01.01.2017.13 – Waste Reduction and Resource Recovery Plan for Maryland for state agency contracts to incentivize the reuse of dredged material.

Mr. Siciliano recommended MDOT MPA investigate if SITES credits or other such certifications could be obtained for reusing dredged material as a recycled product. Mr. Siciliano added that hauling is the major impediment for Stancills, Inc., regarding the reuse of dredged material.

Ms. Straub stated that the 15-20% fines in dredged material is unworkable and will limit its use as structural fill unless amended to decrease this percentage. Ms. Keene stated that dredged material at Cox Creek DMCF is typically 65% silt and added that the RFP may help MDOT MPA identify additional limitations and/or opportunities for various end uses of dredged material.

Ms. Henson asked if MDE had any future updates to the Guidance Document pertaining to the updated Strategy. Mr. Rowe responded that the lessons learned from permitting projects, such as Fleming Park, can be used to advance the Guidance Document.

The difficulties associated with processing dredged material and potential advancement options provided by the Committee include:

• The cost of dredged material is often higher compared to other fill options due to processing (drying, amending, etc.). Consider providing a discount on wet dredged material to provide incentive to end users to purchase dredged material over other fill options.
• Consider developing procurement language for state contracts similar to Executive Order 01.01.2017.13 – Waste Reduction and Resource Recovery Plan for Maryland to incentivize the reuse of dredged material.
• Consider investigating possible certifications or distinctions that apply to dredged material directly or the use of dredged material in a project, such as SITES.
• Using the RFP projects, consider identifying additional limitations and/or opportunities for end uses of dredged material.
• Develop lessons learned for dredged material projects to advance the MDE Guidance Document.

Are there research and development needs for dredged material?
Mr. Denney recommended that MDOT MPA determine the lead time for agencies, the private sector, and other potential customers to decide if they will proceed with reusing dredged material.

Mr. Denney stated that the maximum cost-effective distance for hauling dredged material could increase if dredged material reuse intensifies due to limited DMCF capacity. Ms. Keene added that MDOT MPA is working with the University of Maryland Center of Environmental Science (UMCES) to investigate the economics of reclaiming dredged material and to determine the true cost of recovering a cubic yard of dredged material for reuse. Mr. Denney recommended that MDOT MPA increase the demand for dredged material by performing a market evaluation to determine products that could use dredged material. This increased demand could then create a political impetus to allow MDOT MPA to purchase additional property for innovative reuse.

Ms. Keene stated that MDOT MPA has not investigated developing a dredged material blend to meet structural fill specifications. Mr. Haid suggested that MDOT MPA develop a structural fill blend.

Mr. Brennan suggested broadening the scope of end uses investigated for dredged material. Though it would need to be contained due to its high silt content, dredged material could be used for wetland creation and restoration.

Ms. Straub suggested addressing the original source of water within the DMCF as oppose to aggressively dewatering the dredged material prior to reuse. Mr. Brennan stated that the recirculation of water from within the DMCF can greatly reduce the introduction of additional water to the site. Ms. Keene stated that small dredging projects can be mechanically unloaded at Cox Creek, but mechanically unloading large dredging projects, such as USACE dredging projects, would require a significant amount of time and added costs.

Mr. Rowe stated that the design of facilities could be constructed in a way to promote dewatering and material segregation, similar to the Kurtz Brothers facility in Ohio. Ms. Keene clarified that the annual volume of dredged material in the Cleveland Harbor is significantly less than in the Chesapeake Bay, and the material has a higher sand content; additionally, at the Kurtz Brothers facility the material with a high sand content is unloaded hydrologically while material with a low sand content is unloaded mechanically. Ms. Keene added that MDOT MPA included the construction of a cross-dike in the design plans for Cox Creek DMCF expansion to have segregated cells to assist with water management. MDOT MPA will continue to investigate how the site can be better utilized for innovative reuse. Mr. Rowe added that James Island could be used as a staging area for beneficial use and climate resiliency projects near Dorchester County.
Mr. Bannerman reminded the Committee of a past presentation provided by the Belden Brick Company and suggested incentivizing academic or private sector research for dredged material end products. Ms. Keene added that the RFP and the Maryland Industrial Partnerships (MIPS) Program can provide funding for innovative reuse projects. Additionally, the SM³ group is researching how best to use existing programs to facilitate reuse opportunities and research and development for dredged material and other waste streams like contaminated plastic, biosolids, and fly-ash. The SM³ group is in coordination with the Department of Commerce to determine how to connect individuals with resources, direct people with project ideas to available programs, and market/advertise the MIPS program in a better way to reach a broader audience. Mr. Haerle stated that he will be the chairman of a sub-cabinet group that will move SM³ initiatives forward into economic entrepreneurial ventures.

The research and development needs provided by the Committee include:

- Consider developing lead time for agencies, the private sector, and other potential customers to decide if they will proceed with reusing dredged material.
- Consider conducting a market analysis/evaluation for dredged material.
- Consider developing a dredged material blend to meet structural fill specifications.
- Consider investigating alternative dredging methods that limits the introduction of water.
- Consider developing and incorporating designs that will promote dewatering and dredged material segregation at existing and future facilities, such as using James Island as a staging area for beneficial use activities in southern Maryland.
- Consider incentivizing academic and private industry research into dredged material end-use products.

How can we build on progress we have made to-date promoting the innovative and beneficial use of dredged material? Are there additional education and outreach needs?

Mr. Pattison relayed that one of the major challenges is educating the general public about dredged material, its characteristics, and its environmental and ecological value. This is a continuing outreach process that is a priority for MDOT MPA.

Mr. Rowe stated that Maryland has a joint federal/state permit for tidal and nontidal alterations and impacts to wetlands and waterways. Federal resource agencies, such as the United States Fish and Wildlife Service and National Oceanic Atmospheric Administration (NOAA) Fisheries, are a part of the joint permit review process and can sometimes be barriers for a project due to a lack of awareness regarding the overall project benefits of dredged material reuse. Mr. Rowe suggested that MDOT MPA provide education and outreach to federal resource agencies regarding the overall benefits of beneficial use projects. Mr. Blazer suggested providing a presentation for the Joint Evaluation Committee. Mr. Pattison stated that the representatives from federal resource agencies that are members of the DMMP Management Committee could promote the innovative and beneficial use of dredged material at their respective agencies.

Ms. Keene used examples of outreach tools developed by MDOT MPA to disseminate the information from the DMMP Annual Report to a broader audience and the tools previously discussed in the lessons learned that were developed for the innovative reuse branding campaign. Ms. Keene asked that the Committee consider new outreach tools or methods that MDOT MPA should be utilizing to reach new audiences.
The additional education and outreach needs requested by the Committee include:

- Consider providing education and outreach for the federal resource agencies regarding the overall benefit of dredged material reuse projects. Such agencies/groups include the United States Fish and Wildlife Service, the National Oceanic Atmospheric Administration (NOAA) Fisheries, and the Joint Evaluation Committee.

**Additional Input/Considerations?**

Mr. Denney recommended that MDOT MPA should be marketing/selling dredged material, not just promoting its reuse. Mr. Denney asked if MDOT MPA Harbor Development is structured to manage sales/marketing of dredged material, such as a full-time position at MDOT MPA. Ms. Keene stated that MDOT MPA is geared to manage sales and outreach related to dredged material through a team of consultants and other agencies supporting and implementing the Innovative and Beneficial Use Strategy. While there is a need to focus on the marketing and sales of dredged material, currently the limiting factor is MDOT MPA’s inability to produce large volumes of dried dredged material in a timely manner. MDOT MPA is actively seeking property acquisition of the ~170-acre Tronox property adjacent to the Cox Creek DMCF to be able to dedicate approximately 40-acres to large-scale innovative reuse material processing.

The additional input and considerations provided by the Committee include:

- Consider hiring/subcontracting a full-time marketing analyst/broker.

**Upcoming 2020 Meetings**

IRC Meetings: June 2, August 25, December 1
DMMP Committee member field trip (location – TBD): September 11 (sign up required)
DMMP Annual Meeting: November 6

Meeting adjourned at 7:00pm