

**Community Advisory Council to the  
Environmental Management Commission  
Building 1206  
Camp Edwards, Massachusetts  
June 30, 2022  
6:00 p.m.  
Meeting Minutes**

**CAC Members:**

Mark Harding  
John Phelan  
Brig. Gen. Virginia Gaglio  
Raymond Jack  
Ralph Vitacco  
Heather McElroy  
Shawn Cody

**Organization:**

Wampanoag Tribe  
Mashpee  
MA ANG  
Falmouth  
Sandwich  
Cape Cod Commission  
MA ARNG

**Telephone:**

508-965-0452  
774-836-0691  
339-202-3705  
508-457-4552  
508-888-8001  
508-744-1217  
508-968-5154

**E-Mail:**

mark@wampworx.com  
jphelan@mashpeema.gov  
Virginia.i.gaglio.mil@army.mil  
capejacks@comcast.net  
rvitacco@sandwichmass.org  
hmccleroy@capecodcommission.org  
Shawn.c.cody.civ@army.mil

**EMC Staff:**

Len Pinaud

**Organization:**

EMC Environmental  
Officer

**Telephone:**

508-946-2871

**E-Mail:**

Leonard.pinaud@mass.gov

**Attendees:**

COL Matthew Porter  
COL Mark Kalin  
LTC John Bagaglio  
MAJ Alex McDonough

**Organization:**

MA ARNG  
MA ARNG  
MA ARNG  
MA ARNG

**Telephone:**

508-789-8375  
339-202-3301  
339-202-3981  
774-286-1373

**E-Mail:**

Matthew.n.porter.mil@army.mil  
Mark.e.kalin.mil@army.mil  
John.s.bagaglio.mil@army.mil  
Alexander.v.mcdonough.mil@mail.mil

Paulo Baganha  
Jake McCumber  
Rob Crevey  
Kathleen Kolva  
Brig. Gen. Chris Faux  
Michael Ciaranca  
Emily Kelly  
Steve Simpson  
Tim Shea

MA ARNG  
MA ARNG  
MA ARNG  
MA ARNG  
JBCC  
E&RC  
E&RC  
USCG

339-202-3960  
339-202-9343  
317-525-0691  
339-202-9307  
339-202-3913  
339-202-9358  
339-202-9341  
207-610-2315  
508-259-4967

Paulo.a.baganha@army.mil  
Jacob.c.mccumber.nfg@army.mil  
Robert.j.crevey.nfg@army.mil  
Kathleen.a.kolva.civ@army.mil  
Christopher.m.faux.civ@army.mil  
michael.a.ciaranca.nfg@army.mil  
emily.d.kelly2.nfg@army.mil  
Steven.m.simpson@uscg.mil  
timyshea@aol.com

**Handouts Distributed at Meeting:**

1. Draft Meeting Minutes, Community Advisory Council, May 15, 2019
2. Draft Meeting Minutes, Joint Community Advisory Council and Science Advisory Council, July 29, 2020
3. Draft Meeting Minutes, Joint Community Advisory Council and Science Advisory Council, October 8, 2020
4. Environmental Officer Update, June 2022
5. Impact Area Groundwater Study Program PFAS Investigation Update, June 30, 2022
6. Camp Edwards Update, 30 June 2022
7. Natural Resources & Training Lands Management Update
8. Tango Range, 2022

**Agenda Item #1. Welcome – Ms. Mimi McConnell, CAC Chair**

Mr. Harding welcomed everyone to the Community Advisory Council (CAC) meeting. Mr. Harding is the CAC Vice Chair and will chair the meeting in CAC Chair Mimi McConnell's absence. Mr. Harding remembered Ms. Virginia Valiela, a long-time CAC member and civic leader from Falmouth who passed away last year.

**Agenda Item #2: Review of CAC Minutes and Approval – Ms. Mimi McConnell, CAC Chair**

Review of the meeting minutes was postponed until the next meeting when there is a quorum.

**Agenda Item #3: Public Comment – Ms. Mimi McConnell, CAC Chair**

There was no public comment.

**Agenda Item #4: Environmental Officer Update – Mr. Leonard Pinaud, EMC Environmental Officer**

Mr. Pinaud, Environmental Management Commission (EMC) Environmental Officer (EO), summarized the activities related to the Upper Cape Water Supply Reserve (the Reserve).

- The Annual State of the Reservation Report covers all activities at Camp Edwards and the Reserve including where and how often soldiers train, ammunition used and where it is fired, the environmental cleanup programs and information on water supply.
- The Annual State of the Reservation Report activities happening at Camp Edwards and the Upper Cape Water Supply Reserve (the Reserve), including information about the Air Force and Army cleanup programs, water supplies, and training at Camp Edwards in the Reserve. It serves as a good resource.
- The EMC now has its own webpage as part of the Executive Office of Energy and the Environment's website. The goal is to ensure the public knows where they can get current information relating the EMC.
- Non-compliance with the Environmental Performance Standards (EPSs) General Performance Standard. The MAARNG self-reported to the EMC that an unauthorized training item was used. There was no adverse environmental effect associated with that; so, the EMC responded to the MAARNG that the self-report was acceptable.
- The US Environmental Protection Agency (US EPA) is conducting a Sole Source Aquifer Review. There is coordination ongoing among the EMC, the Massachusetts Army National Guard (MAARNG) and US EPA. More information about the Sole Source Aquifer Review is on the US EPA's website.
- A Science Advisory Council (SAC) meeting was held June 16, 2022. An EMC meeting will be held on July 19, 2022.
- New CAC appointees at the meeting (Ray Jack, Shawn Cody, Heather McElroy, Ralph Vitacco, and Jack Phelan) introduced themselves and spoke briefly. One appointment (Capt. Sean Hannigan) is pending. An orientation for new CAC members was held on June 15, where they learned about Open Meeting Law and had a tour of the Reserve.
- Twenty-three range inspections were completed between January and present day.

CAC members discussed the information and asked questions.

Was there anything to that should be noted in regard to what the SAC decided or any agenda items?

- The SAC voted to recommend to the EMC that they approve the redesign and rewrite of the Operations, Maintenance and Monitoring Plan for the redeveloped Tango Range at Camp Edwards. The Tango Range Design and Operations, Maintenance and Monitoring Plan is on the CAC agenda.

**Agenda Item #5: Impact Area Groundwater Study Program Update – Mr. Shawn Cody, Program Manager**

Mr. Cody, Impact Area Groundwater Study Program (IAGWSP) Federal Program Manager, gave an update on the IAGWSP's per-and polyfluoroalkyl substances (PFAS) investigation.

- The IAGWSP has been conducting investigations in the northern 15,000 acres since 1996; it is broken up into 14 operable units. All 14 units have been investigated and IAGWSP has received Decision Documents on all 14 operable units. There are seven groundwater plumes with active treatment. IAGWSP works with MassDEP and US EPA under an enforcement action; the program continues to monitor and cleanup the plumes.
- IAGWSP became aware of PFAS in 2013. PFAS is in substances like Aqueous Fire Fighting Foam, Teflon, Scotch Guard, so it is ubiquitous in the environment. An anecdotal paper was written that said if there was an open burn/open detonation (OB/OD) site, firefighting foam would likely be used there. IAGWSP began sampling for PFAS and PFOA and in 2019, IAGWSP sampled OB/OD sites, the contractor test ranges (known as the J ranges), and Demo 1, where confiscated fireworks were destroyed from the 1970s to 1990s.
- IAGWSP took 243 samples from its existing wells. There were 16 exceedances of MassDEP's 20 parts per trillion Massachusetts Maximum Containment Level: seven at J3 Range, six at five different monitoring wells and also at the J2 North Plume, which flows towards the Upper Cape Water Supply Cooperative.
- IAGWSP will continue working with MassDEP and US EPA. IAGWSP briefs the Upper Cape Water Supply Cooperative and are working with them to sample their sentinel wells. IAGWSP is also working with them to put monitoring wells closer to the drinking water well.

**Agenda Item #6: Camp Edwards Update** – *COL Matthew Porter, MA ARNG, MAJ Alex McDonough, MA ARNG, Mr. Jake McCumber, Natural Resources and Training Lands Manager, MA ARNG*

Mr. Porter discussed changes in leadership; he is the past Commander of Camp Edwards and is now the full time base manager. LTC (P) John Bagaglio: is the new Camp Edwards Commander. COL Mark Kalin is the new Land Component Commander.

MAJ McDonough provided a Camp Edwards update to the CAC.

- Additional staff changes at Camp Edwards were announced and the public outreach program and the Camp Edwards tours were discussed.
- During Covid, Camp Edwards hosted one of the largest Reserve Officer Training Corps, Advance Camp Program, in the nation while active-duty bases were closed.
- Operation Viking was held in 2021, conducted by a Civil Affairs Battalion, which used the US Coast Guard airfield as a drop zone with static line parachute operations, equipment drops and freefall or halo operations. The training will occur again this year from July 17 to July 30 with 500 soldiers. Camp Edwards will release a public notification regarding increased air traffic with C5s, C17s, and C130s flying in the area. Patriot Crucible is an event that provides collective training to soldiers. It will be held this year with the engineer battalion as the primary training audience.
- The STAPP systems on Juliet and Kilo ranges were decommissioned in October 2020 as they had reached the end of their useful life and the MAARNG moved from using lead ammunition to the copper Enhanced Performance Round (EPR). The ranges were decommissioned and placed in caretaker status.
- Camp Edwards continues its range monitoring program. The last samples were taken in Fall 2021, and the monitoring data shows that range management continues to be protective of the environment. There were no exceedances.
- The Multi-Purpose Machine Gun Range is pending the US EPA's Sole Source Aquifer Review; the MAARNG is in close contact with both the EMC and US EPA. Once that review is complete, the EMC process will continue.

Mr. McCumber provided an update on Natural Resources and Training Lands Management.

- Updates included information on annual and long-term monitoring and surveys.
- The youth and general turkey hunts held in April/May and last fall's deer hunts. An overarching road maintenance and trap shrimp management plan/permit was developed with MassWildlife; there is coordination and planning for road maintenance priorities and in-house puddle improvement.
- Natural communities identification and mapping is ongoing with US Fish and Wildlife Service.
- There has been substantial development for the Wildland Fire program; as of early June, 306 acres burned, 11 burn operations and 20 position task book evaluations for three agencies were completed.
- Habitat rehabilitation and restoration is ongoing including BA-3 barrens and maneuver restoration, dig sites rehabilitation, and Range Area West 3/East 3.
- The program is monitoring the Southern pine beetle: monitoring, and conducting resilience planning, partnership development, and preparedness through habitat restoration.
- Broad public outreach has been a dominant focus since summer 2021 including public tours of the training site, public grassland bird tours, and clubs/group presentations on rare species and conservation.

CAC members discussed the information and asked questions.

Can you give more detail on range monitoring?

- Soil, surface soil, porewater and groundwater are monitored. Porewater is rainwater percolating through the soil and is collected in a bucket four feet underground with a filter on it. The porewater is tested for metals, primarily copper, lead and antimony. During the last two years, at the request of the SAC Ad Hoc Committee, the MAARNG began testing for substances that can make metals mobile in soil. The substances that make metals mobile in soil are static; nothing is moving, and the MAARNG continues to be protective of the environment. The Annual State of the Reservation Report contains all the monitoring data.

When will the public service announcement that you did with Jeff Corwin appear?

- The US Fish and Wildlife Service will be editing that and plan to get it out soon. Mr. McCumber will make sure everyone receives a copy of that public service announcement.

**Agenda Item #7: Tango Range Design and Operations, Maintenance and Monitoring Plan – COL Matthew Porter, MA ARNG, MAJ Alex McDonough, MA ARNG**

MAJ McDonough presented information on the Tango Range Design and Operations, Maintenance and Monitoring Plan (OMMP).

- The General Environmental Performance Standard (EPS) that governs Tango Range is that live weapons fire is not allowed on established small arms ranges unless they are in accordance with EPS 19 and other applicable EPSs. EPS 19 requires that the EMC Commissioners review and approve the range design, and the MAARNG have an Operations, Maintenance and Monitoring Plan (OMMP) that captures and contains munitions fired, manages the range, and the MAARNG monitor and report findings on the range.
- Tango Range was originally a 10-lane STAPP Range for use with lead ammunition. Tango Range has been redesigned for use with the Copper Enhanced Performance Round (EPR). Tango Range was redesigned into a 32-lane range and was moved 25 meters to the north to prevent a Surface Danger Zone (SDZ) conflict with Sierra Range, allowing the ranges to be used simultaneously. Tango Range will be used to “zero” weapons before soldiers move next door to Sierra Range to qualify.

- Tango Range was designed with the EMC Environmental Officer's (EO's) participation and input throughout the design process.
- The next step is to request the EMC authorize its EO to approve the redesign of the range and rewrite of the OMMP for the redevelopment of Tango Range.

CAC members discussed the presentation and asked questions.

With Tango Range coming on-line, does another range go off-line? Define small arms and how many rounds are fired at the zero ranges as opposed to the qualifying range?

- Juliet and Kilo ranges were taken offline because they are former STAPP ranges and there is not the need for that many 25 meter ranges; they are in caretaker status. India Range is another 25 meter range that can serve as overflow when a large unit is at Camp Edwards and requires a lot of capacity of zeroing.
- Small arms are everything 50 caliber and below. Large ammunitions are items like artillery and mortars. Small arms are fired at Camp Edwards.
- The Annual State of the Reservation Report has numbers for all annual usages for all the ranges.
- Thirty rounds per soldier are used on a zero range, and 40 rounds are used for qualification. Soldiers are authorized a practice run for 40 rounds along with an additional requirement where soldiers fire 15 rounds before they qualify: they have to zero their weapon and then successfully engage four out of five times at the 300 meter, 200 meter, and 100 meter targets before they can even get to qualify.

This replaces all the STAPP ranges and now they will all be copper? Is the copper recycled?

- All the STAPP ranges are decommissioned. The Army has moved to the copper EPR and they are no longer required. The STAPP systems were reaching the end of their useful life. Earthen berm is more economically and ecologically sound.
- The copper is recycled and is required by the OMMP for the copper ranges that the MAARNG do a twice annually joint inspection with the EO looking at the bullet density in the capture berms. If there is a high density that may cause bullet on bullet impact that is when cleanup of the berm is triggered. The berm would be dug out, the rounds separated from the berm material, the berm rebuilt, and the metals recycled.

Can you calculate the recapture of rounds; do you have a certain percentage?

- When the ranges were initially built, the MAARNG completed a lot of studying and lines of site on capture rates. The EPR has a copper slug and steel penetrator, which generally rusts away over time; so, the mass balance is difficult to determine, but it was around 80 to 90 percent when the capture was done for the EPR. The only lead round fired at Camp Edwards, the 9 millimeter pistol round, was close to 100 percent capture when testing was done, based on the low muzzle velocity, and the slope of and material in the berm captures the round very effectively.

The CAC is being asked to make a recommendation to the EMC to authorize Mr. Pinaud to approve the design and the rewrite of the operations plan? Mr. Pinaud would do that based on guidance from the EPSs?

- The precedent is that the MAARNG asks the EMC Commissioners to allow the EO (Mr. Pinaud) to approve the design and the OMMP.
- The OMMP is written in accordance with the EPSs; essentially, it is like an SOP with additional items that the EPS's require. The OMMP is very detailed: how the range was constructed; standards that need to be maintained, monitoring requirements, and action levels for constituents of concern.

Without a quorum, the CAC can't vote. Can the CAC make a recommendation to the EMC?

- Yes. The EMC Commissioners would like feedback on this from the SAC and CAC; a recommendation would be very useful.

CAC members said they support, have no objection, or are comfortable with the EMC EO moving the redesign and rewrite of the OMMP for the redeveloped Tango Range forward to the EMC.

**Agenda Item #8: Vote:** *The CAC shall discuss a vote to provide a recommendation to the EMC on the Tango Range Operations, Maintenance and Monitoring Plan*

The CAC did not vote as there was no quorum.

**Agenda Item #9. Adjourn** – *Ms. Mimi McConnell, CAC Chair*

The meeting adjourned at 7:25 p.m.