



CITY OF MORRO BAY HARBOR ADVISORY BOARD AGENDA

The City of Morro Bay provides essential public services and infrastructure to maintain a safe, clean and healthy place for residents and visitors to live, work and play.

**Regular Meeting
Thursday, December 5, 2024 – 5:30 P.M.
Veterans Memorial Hall
209 Surf St., Morro Bay, CA**

Cal Myers	Recreational Boating
Cherise Hansson	Waterfront Leaseholders
Gene Doughty	South Bay/Los Osos
Sean Green	Member at Large
Christopher Vaile	Member at Large
Mary Witkowski	Marine Oriented Business
Jeremiah O'Brien	Morro Bay Commercial Fishermen's Organization
Lori French	Alternate to Jeremiah O'Brien (MBCFO)

Public Participation:

Public participation is allowed in the following ways:

- *Community members may attend the meeting in person at the Morro Bay Veterans Memorial Hall.*
- *Alternatively, members of the public may watch the meeting and speak during general Public Comment or on a specific agenda item by logging in to the Zoom webinar using the information provided below. Please use the "raise hand" feature to indicate your desire to provide public comment.*

Please click the link below to join the webinar:

- <https://us02web.zoom.us/j/82722747698?pwd=aWZpTzcwTHlRTk9xaTlmWVNWRWFUQT09>

Password: 135692

- *Or Telephone Attendee: 1 (408) 638-0968 or 1 (669) 900 6833 or 1 (346) 248 7799; Webinar ID: 827 2274 7698; Password: 135692; Press * 9 to "Raise Hand" for Public Comment*

- *Members of the public may watch the meeting either on cable Channel 20 or as streamed on the City [website](#).*
- *Community members are encouraged to submit agenda correspondence in advance of the meeting via email to the Harbor Advisory Board at hab@morrobayca.gov prior to the meeting. Agenda Correspondence received at hab@morrobayca.gov by 10 a.m. on the meeting day will be posted on the City website.*

ESTABLISH QUORUM AND CALL TO ORDER

MOMENT OF SILENCE

PLEDGE OF ALLEGIANCE

CHAIR, ADVISORY BOARD MEMBER & COUNCIL LIAISON ANNOUNCEMENTS AND PUBLIC OUTREACH REPORTING

PRESENTATIONS

January 2025 Bird Festival - Robbie Revel, Executive Director MBBF Planning Committee

PUBLIC COMMENT

Members of the audience wishing to address the HAB on Harbor business matters not on the agenda may do so at this time. For those desiring to speak on items on the agenda, but unable to stay for the item, may also address the HAB at this time.

A. CONSENT CALENDAR

Unless an item is pulled for separate action by the Board, the following actions are approved without discussion. The public will also be provided with an opportunity to comment on consent agenda items.

A-1 Approval of Minutes from the Harbor Advisory Board meeting held on October 1, 2024
RECOMMENDATION: Approve as submitted.

A-2 Harbor Department Status Report
RECOMMENDATION: Receive and file report.

B. BUSINESS ITEMS

B-1 Harbor Department Updates
RECOMMENDATION: Receive and file update.

B-2 Mooring Field Ad-Hoc Committee
RECOMMENDATION: Receive and file committee update.

C. DECLARATION OF FUTURE AGENDA ITEMS

Pending items previously declared:

- TOT Derived from Waterfront to be used by the Harbor Fund
- Goals Work Planning Process - Reform Ad-hoc Committees
- Coleman Park Update
- CFAC Joint Ad-Hoc Committee
- Parking Ad-Hoc
- Waterfront Master Plan

D. ADJOURNMENT

This agenda is subject to amendment up to 72 hours prior to the date and time set for the meeting. Please refer to the agenda posted at the Morro Bay Harbor Department, 1275 Embarcadero, for any revisions or call the department at 772-6254 for further information.

Materials related to an item on this Agenda are available for public inspection during normal business hours at the Harbor Department, 1275 Embarcadero Road, or online at www.morrobayca.gov. Materials related to an item on this Agenda submitted to the Board after publication of the Agenda packet are available for inspection at the Harbor Department during normal business hours or at the scheduled meeting.

MINUTES-MORRO BAY HARBOR ADVISORY
BOARD MEETING – AUGUST 1, 2024
VETERAN'S MEMORIAL HALL – 5:30 P.M.

AGENDA NO: A-1

MEETING DATE: December 5, 2024

PRESENT:	Cal Myers	Chair
	Cherise Hansson	Vice-Chair
	Christopher Vaile	Member
	Lori French	Member
	Sean Green	Member
	Gene Doughty	Member
	Mary Witkowski	Member
STAFF:	Yvonne Kimball	City Manager
	Chief Dan McCrain	Interim Harbor Director
	Lori Thompson	Harbor Business Coordinator
	Becka Kelly	Harbor Patrol Supervisor

ESTABLISH QUORUM AND CALL TO ORDER

<https://youtu.be/nCzMuobeaEk?si=pRgFdfOpSMkUeERS&t=35>

The meeting was called to order at 5:30 p.m., with a quorum present.

MOMENT OF SILENCE

PLEDGE OF ALLEGIANCE

CHAIR, ADVISORY BOARD MEMBER & COUNCIL LIAISON ANNOUNCEMENTS AND PUBLIC
OUTREACH REPORTING

PRESENTATIONS

https://youtu.be/nCzMuobeaEk?si=EKTKikZ_tHqbLRva&t=367

Morro Bay National Estuary Program, Melodie Grubbs

PUBLIC COMMENT

<https://youtu.be/nCzMuobeaEk?si=riN7v4wBWWIFGH35&t=1638>

The public comment period was opened.

Bill Luffee commented on the new life jacket station at Coleman Beach and announced he is running for City Council.

Council Member Landrum updated the Board on Windfarm activities and the City's 60th celebration.

City Manager Kimball updated Board on the status of the Harbor department with the recent retirement of Harbor Director Schiafone.

Chief Daniel McCrain presented his goals for the department as Interim Harbor Director.

The public comment period was closed.

A. CONSENT AGENDA

<https://youtu.be/nCzMuobeaEk?si=bvUVTB9kLWW0BpDP&t=2407>

Unless an item is pulled for separate action by the Board, the following actions are approved without discussion.

- A-1 Approval of Minutes from the Harbor Advisory Board meeting held on March 7, 2024.
RECOMMENDATION: Approve as submitted.
- A-2 Approval of Minutes from the Harbor Advisory Board meeting held on May 2, 2024.
RECOMMENDATION: Approve as submitted.
- A-3 Harbor Department Status Report.
RECOMMENDATION: Receive and file report.

MOTION: Board Member Hansson moved to approve the consent agenda. The Motion was seconded by Board Member Doughty and carried unanimously, 7-0-0.

B. BUSINESS ITEMS

<https://youtu.be/nCzMuobeaEk?si=RvZBph206IPT7eNo&t=2440>

B-1 COMMERCIAL VESSEL FEES AD-HOC COMMITTEE

Committee Member Myers gave a brief oral report on the committees last meeting and objectives.

Committee Member Witkowski spoke to the comparison of slip fees to other harbors.

The public comment period was opened and closed with no comments.

B-2 MOORING FIELD AD-HOC COMMITTEE

<https://youtu.be/nCzMuobeaEk?si=gHvSZzagoiO1UhUR&t=2800>

Committee Member Myers gave a brief oral report on the committee's formation and meetings.

Committee Member Doughty discussed the remedies that were put into place.

Committee Member Vaile explained most mooring collisions are caused by opposing wind and tide conditions.

There was Board discussion

Harbor Patrol Supervisor thanked the committee for their work.

The public comment period was opened.

Chuck Lostness, Morro Bay Yacht Club, spoke to concerns of mooring swing circles.

The public comment period was closed.

C. DECLARATION OF FUTURE AGENDA ITEMS

<https://youtu.be/nCzMuobeaEk?si=1uSV36MgDoIYwMwO&t=3656>

There was Board and City Manager discussion.

The Board declared review of the Harbor Director's job description to be added to the future item list.

D. ADJOURNMENT

This meeting was adjourned at 6:30 p.m.

Lori Thompson
Harbor Department



AGENDA NO: A-2

MEETING DATE: December 5, 2024

Staff Report

TO: Harbor Advisory Board

DATE: November 25, 2024

FROM: Harbor Staff

SUBJECT: Harbor Department Status Report

RECOMMENDATION

Receive and file report.

DISCUSSION

Recent Harbor Department Activity:

Harbor Patrol Statistics

<p>October 2024: bay patrols: 90 land patrols: 205 emergency responses: 10 calls for service: 134 assists of other agencies: 39 enforcement contacts: 42 trainings: 50 maintenance actions: 225 restrictions on the harbor entrance: 6</p>	<p>November 2024: bay patrols: land patrols: emergency responses: calls for service: assists of other agencies: enforcement contacts: trainings: maintenance actions: restrictions on the harbor entrance: 11</p>
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Harbor Patrol Noteworthy Responses

As a general reminder for the winter season, we are requesting all boat owners to pay close attention to their boats for loose gear, worn tie up lines and operable bilge pumps. Harbor Patrol responded to many boats over the last couple months with issues on these topics. The larger tidal swings, stronger winds, pushing swells and pouring rain all influence boats inside the harbor. The responsibility of maintaining your vessel to its best performance will help it to endure the winter months.

October 24. Harbor Patrol Officers (HPO) received a report of a partially sunken vessel in roughly 60 feet of water directly off the coast from Villa creek/Abalone farm area. HPOs responded on vessel 3864 and one rescue watercraft (RWC), along with the Coast Guard. On scene, the vessel appeared to be a roughly 35' white S/V with the starboard side bow/hull sticking out of the water, everything aft of that being underwater, the anchor was deployed and appeared to be holding. There was no

Prepared By: BK/LT

Dept Review: LT

City Manager Review: _____

City Attorney Review: _____

other debris in the water and after extensive search, no passengers were found. There were no visible markings on any part of the vessel. An unmarked inflatable skiff was retrieved from shore directly East of sunken vessel. The incident was turned over to the Coast Guard, State Parks and the Sheriff for further investigation. To date, the vessel has now broken up and washed ashore in many pieces along the beaches of Estero Bay and State Parks is leading the cleanup efforts.



November 3. The Harbor Patrol provided boat support and water rescue to the Morro Bay Triathlon. Harbor Patrol assisted the event team with setting/retrieving the buoys to mark the swim and paddle course. One patrol boat and one rescue watercraft monitored the event along with lifeguards and assisted more than 30 swimmers that were not able to complete the challenge.

November 9. Morro Bay Police requested assistance from Harbor Patrol to rescue and detain a possible suspect that fled into the water. The swimmer was associated with a possible theft in town and was hopeful of swimming away.



2024 Lifeguard Season Synopsis

This year started off strong with a great applicant pool and dedicated returning lifeguards to the program. On April 6 we began lifeguard requalification and tryouts. Every returning guard must complete a 500-meter swim in 10 minutes or less as required by the USLA (United States Lifesaving Association) to keep their certification current. This swim is typically held in the bay near Coleman Beach. A minimum number of recurrent training hours is also required annually to retain a USLA certificate.

Tryouts for new applicants consisted of the same swim, plus an additional paddle course and a run-swim-run through the surf. This year we had a total of 27 applicants, with 15 of those making it to interviews after the tryout.

From there, new hires are considered “cadets” until they successfully complete the USLA Academy. Morro Bay Harbor Department is certified by USLA to train lifeguards to their standards. As part of a dedication to water safety in Estero Bay, and a trade in the workload of putting on the 61-hour academy, Morro Bay Harbor Department partners with Morro Bay Recreation Services and SLO County Parks to train incoming lifeguards. This ensures all Morro Bay Beach lifeguards, Junior Lifeguard Instructors, Cayucos Beach lifeguards and Cayucos Junior Guard Instructors are put to the test in the waters they will be working in.

Our Academy started on the last weekend of April with first aid and CPR training. The following two weekends are split between lectures, testing and physical challenges. A final written test and practical concludes the training where cadets demonstrate their newly learned rescue techniques in mock rescues with returning (often non-compliant) guards. The dedication from those that finish is always impressive.

Our lifeguards begin staffing the towers weekends only beginning Memorial Day Weekend. The towers were dragged down the beach from their storage locations, cleaned, stocked for service. By mid-June towers are staffed 7 days per week, 10 am – 6pm. Weekdays we have 3 lifeguards on duty and 4 on the weekends. There are 3 towers stretching from the Rock Parking lot to the City limits line about 2/3 of a mile to the north. This year was particularly busy at the beginning of the season with the newly purchased UTV getting outfitted for lifeguard use and staff trained in its operation. The UTV is an effective tool to drive through the soft sand and endure marine corrosion while posted on the beach with a smaller footprint to navigate through a crowd.

Newly hired guards shadow returning guards to hone their skills as spotters of potential dangers. One of the most valued tenets of lifeguarding, aside from preparedness, is the prevention of problems before they occur. Thus, being able to spot a person in trouble before they actually are in trouble is a valued skill in this field.

Statistics for the season include an estimated 38000 visitors to our beach, 941 public contacts, 104 public assists, 10 medical aids, 137 public safety lectures, 320 training actions, 477 pieces of trash collected, and 6 rescues. One fatality in the water occurred this year that was later attributed to a medical issue and not due to drowning.

After Labor Day, staffing drops back to weekends only until the first weekend of October when we conclude the regular season. Many of the lifeguards are high school or college students and are removed from the roster at that time. There are, however, a few events during the off season for which lifeguards are needed. One of which is the WSL surf competition the first weekend of December.

As of October 13 the lifeguard towers were pulled to their storage locations off the beach marking the conclusion to another successful lifeguard season.



Harbor Patrol Training

Morro Bay Harbor Patrol trains extensively in Rescue Watercraft (RWC) operations. This is a specialty assignment that has annual qualifications to participate in. A weeklong course, certified through K38, consisted of classroom learning, mechanical basics, slow speed operation, night operations and surf training. The training involves performing complex (multiple level) rescue responses in low, moderate, high and severe risk environments.



Council Activity

October 8, 2024

Council provided staff general direction to refine a Request for Proposal in a new solicitation process for the development of Market Plaza and bring back to Council for final review and approval.

October 22, 2024

Council adopted Resolution No. 69-24 amending the Advisory Board By-Laws regarding Appointment and Qualifications of Members for the Harbor Advisory Board and Public Works Advisory Board.

Upcoming Events

November 7, 2024 - January 6, 2025

Annual Winter Faire & Craft Show at 835 Main St. Morro Bay, CA 93442 (805) 772-2504

December 5-8, 2024

SLO CAL Open at Morro Rock - A Men's and Women's World Surf League QS1000 Event

December 6, 2024

Holiday Tree Lighting Celebration at the City Park

December 6-15, 2024

Santa's House on the Embarcadero, Morro Bay

(12/6/2024, 12/7/2024, 12/8/2024, 12/13/2024, 12/14/2024, 12/15/2024)

Time: 5:00 PM to 8:00 PM

December 7, 2024

Breakfast with Santa at the Morro Bay Community Center, 1001 Kennedy Way, Morro Bay

December 7, 2024

Lighted Boat Parade in the Morro Bay Harbor

January 16-20, 2025

Morro Bay Bird Festival, at the Morro Bay Community Center, 1001 Kennedy Way, Morro Bay
805-600-2147



AGENDA NO: B-1

MEETING DATE: December 5, 2024

Staff Report

TO: Harbor Advisory Board

DATE: November 26, 2024

FROM: Chief Daniel McCrain, Interim Harbor Director

SUBJECT: Harbor Department Updates

RECOMMENDATION

Receive and file committee update.

DISCUSSION

The City Council voted during the October 22, 2024 regular meeting to change the number of seats on the Harbor Advisory board from 7 to 5 members. The requirements are as follows; four members required to be registered voters in the city.

- Marine-Oriented Business
- MBCFO (one member and one alternate)
- Waterfront Leaseholder
- Recreational Boating
- Member-at-Large

This gradual reduction from seven members to five would occur as terms for the Member-at-Large seat ending Jan 31, 2025, and South Bay/Los Osos seat ending Jan 31, 2026 are not filled. Recruitments to fill the remaining seats would be conducted as follows, resulting in a 6-member Board for 2025 and a 5-member Board beginning 2026 and thereafter.

2025

- (1) MBCFO representative/alternate & (1) Marine-Oriented Business

2026

- (1) Member-at-large

2027

- (1) Waterfront Leaseholder & (1) Recreational Boating representative

The application period is open for advisory board positions until 5:00pm on December 20, 2024. The following seats are expiring and will need to be filled, except the Member-at-Large seat.

Term Expiration

- Christopher Vaile 1/31/25 Member-at-Large

Prepared By: DM

Dept Review: _____

City Manager Review: _____

City Attorney Review: _____

- Mary Witkowski 1/31/25 Marine-oriented Business
- Jeremiah O'Brien 1/31/25 MBCFO
- Lori French 1/31/25 Alternate Member to MBCFO

Harbor Vitality Director Update:

The Harbor Vitality Director recruitment received several very qualified applicants. In the end we brought forward 5 top candidates for interviews. 2 candidates backed out of the process and 3 participated in a final series of interviews. This process included coffee with the City Manager, a 1-on-1 zoom interview with the Harbor Business Coordinator, a boat tour of the harbor and visit with Harbor staff, an interview panel with the Executive Team and Harbor Patrol Supervisor, and finally an interview panel with the City Manager, Cal Myers, HAB Chair and USCG Chief Eric Ceallaigh. At the completion of this process the City Manager selected Chris Munson as the new Harbor Vitality Director, Chris was previously the Facilities Manager at the Port San Luis Harbor District.

It has been my pleasure to fill in as the Interim Harbor Director for the last few months, I am constantly impressed by the outstanding job the dedicated Harbor Department staff do daily. I want to thank Lori, Becka, Dana, and the rest of the Harbor personnel for all their hard work ensuring that nothing was overlooked while the city determined the best path forward for the department. The city is very lucky to have such a talented, caring and dedicated group of people serving the community. I will be working closely with them and Director Munson to maintain the forward progress on the many different projects Harbor staff are managing during this transition.



AGENDA NO: B-2

MEETING DATE: December 5, 2024

Staff Report

TO: Harbor Advisory Board

DATE: November 26, 2024

FROM: Becka Kelly, Harbor Patrol Supervisor

SUBJECT: Update from the Mooring Field Ad-Hoc Committee on Committee's Recent Activities

RECOMMENDATION

Receive and file committee update.

BACKGROUND, DISCUSSION & CONCLUSION

The Mooring Field Ad-Hoc Committee of the Harbor Advisory Board will be presenting an oral update on their activities.

ATTACHMENT

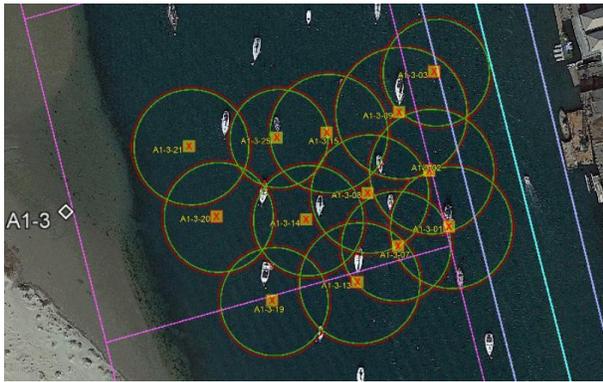
1. Mooring Field Ad-Hoc Committee Report

Prepared By: LS

Dept Review: _____

City Manager Review: _____

City Attorney Review: _____



HARBOR ADVISORY BOARD REVIEW OF MOORING FIELD

December 5th, 2024

ABSTRACT

The Harbor Advisory Board Ad-Hoc Mooring Field committee assessment to review some past allisions and near allisions in Morro Bay Harbor.

HAB Ad-Hoc Mooring Field Committee

Gene Doughty, Chris Vaile, Cal Myers

EXECUTIVE SUMMARY

At the February 2024 Harbor Advisory Board (HAB) the Harbor Director requested an Ad-Hoc Committee be formed to study the mooring field. The impetus was due to a recent increase of incidents and near misses with vessels coming in contact with each other in the mooring field. Also one mooring owner sent a communication to the city council on a near miss. In nautical terms “allision” is the term used when two vessels collide when both vessels are moored. Collision is the term used when at least one vessel is under way.

The short description of the events is that during slack tide and a winter storm with strong wind and big swells in the harbor the vessels on the moorings can move in unpredictable ways and may come in contact with each other.

SCOPE OF STUDY

The Harbor Advisory Board Ad-Hoc Mooring Field committee worked with Morro Bay Harbor Department Supervisor, the Morro Bay Yacht Club (MBYC) and some members of the public who had interest/expertise the mooring field. The initial scope for the committee was to:

- Gain an understanding of the breadth of the actual incidents that have occurred
- Review what actions had been taken
- Discuss potential solutions both short term and medium term
- Determine if there were other activities that either the City/Harbor Department or the Mooring holders should undertake that could alleviate or prevent future problems

BACKGROUND AND METHODOLOGY

A typical mooring field with a single line allows each vessel to swing in a circle based on the length of the line that attaches it to the sea floor. This line to the seafloor is not “straight up and down” but is a multiple of the typical depth of water, called “scope”. A simple example is the water depth is 10 feet with a 3 to 1 scope, which means there are 30 feet of line from the seafloor to the vessel tie off. Under typical conditions all the vessels move in unison as the tides influence the position of the vessels. These circles overlap in order to use the mooring field efficiently. In Morro Bay the vessel bows to the north as the tide comes in and to the south as the tide goes out. When the tides change direction there is no current pushing the vessels, known as slack tide, and other factors impact how the vessels move such as wind and the swells in the harbor. In extreme weather such as winter storms the wind and swells can push the vessels in unpredictable ways. Under certain conditions the vessels can potentially come into contact with each other in an “allision event”.

The MBYC manages approximately 25 mooring that are directly in front the MBYC facility. They had formed their own committee to study the issue for their own members (see section below for more details). Beyond the MBYC leadership they had members that were knowledgeable about different anchoring methods and conducting MultiBeam Echo Sounding (MBES) bathymetric surveys of the existing mooring field. The HAB Ad-Hoc meet several times with the MBYC for this study.

CURRENT REVIEW & STATUS OF RECENT INCIDENTS

Based on the information shared by the Harbor Department and the MBYC the only recent incidents were limited to the MBYC controlled moorings. For the 2023/2024 winter storm season the MBYC had at least four (4) reported allisions events. Since it was all MBYC moorings they chose to review how the MBYC moorings were laid out and the types of vessels that were assigned to each location. The HAB Ad-Hoc contacted the MBYC club to work with them and leverage all the existing effort that they had accomplished. The HAB Ad-Hoc also contacted the Harbor Patrol to research any other reported incidents during the same timeframe. There were no other reported actual allision events outside of the MBYC. Although there were some “near misses” by other privately owned mooring field owners from the 2023/2024 winter storm season. There was at least one privately held mooring holder that sent written communication to the Harbor Department and City Council of their “near miss”.

The MBYC had also done some considerable research into alternative anchoring methods and the characteristics of their moorings. The current configuration is a large cement block set upon the sea floor with a large anchor chain. A simple example is 2000 lbs. block, that is in 10 feet of water with a 30-foot chain. This equates to 3 to 1 scope. Given the length of the vessel the circle in which it swings can be roughly calculated with some well-known math. The actual formulas are much more complex, and beyond the scope of this document. Each vessel moves differently depending on the characteristics below and above the waterline.

The Harbor Department requires each mooring to be inspected every two years. The purpose is to inspect the entire attachment to ensure there are no failures that would cause the vessel to become detached from the mooring. They also record the uncorrected GPS location of the cement block during each inspection.

ACTIONS TAKEN

Since the allision events all take place under unpredictable circumstances it is hard to ensure any actions taken will be sufficient to remediate the issues. Given the experience and history of the individuals involved there is high degree of confidence the changes made may alleviate the issues from 2023/2024 storm season. But no guarantee can be made against the seas, tide and the weather.

Specific short-term actions taken:

- The MBYC in conjunction with the Harbor Patrol relocated several mooring blocks to adjust the spacing between the vessels
- Under direction of the Harbor Patrol at least 4 mooring sites have been configured with 2.5 to 1 scope, i.e. shorter anchor chain to reduce their “swing circle”
- One of the larger vessels in the Harbor involved in several incidents was relocated to a different mooring that is expected to minimize future events with that vessel

There were some medium-term actions discussed and were taken to a point where some decisions and funding would be required to move further. They are documented here. If they are to be pursued some background information has been provided.

Specific medium-term actions taken:

- One of the members of the ad-hoc had a professional survey capability to provide highly accurate locations of each of the mooring blocks and overlay this information onto mapping software. This individual provided free of charge a study of small subset of mooring locations. The mooring locations that were chosen were MBYC specific and were the most problematic for allisions. A copy of the report is not include here but can be obtained via the Harbor Department if interested.
- The MYBC also performed mapping of its mooring field using “off the shelf” technology and have compiled a record of the as-built characteristics of their moorings.
- Lastly during the mooring inspections the Harbor Department collected the GPS locations via cell phone and recorded that on the inspection report. It is not a mandatory item for the inspection report.

Longer term actions reviewed by the larger Ad-Hoc:

- One idea was to have the entire mooring field surveyed and mapped out by a qualified licensed bathymetric surveyor (see medium term actions). Although attractive, it didn’t address the issue of what size and type of vessel is suitable for a specific location. The bathymetric survey would, however, provide depths which would govern the size of a swing-circle and thus vessel size.
- As follow on to the above idea is to request a full engineering design for the mooring field and possibly include newer standard and/or technology. This course of action had a several challenges:

- As most of the moorings are privately held, what would be the implication of changing out the moorings
- There are technologies that would allow a denser mooring allowing an increase of vessels to be moored to a certain area, but this lead to discussion about the carrying capacity of the harbor.
- The engineering would require a bathymetric survey of areas under consideration.
- Finally there was the “who pays for the study” discussion.

CONCLUSIONS

The HAB Mooring Field Ad-Hoc recommends having the Harbor Patrol to continue its diligence in monitoring the vessels in the harbor for any potential incidents. And as always prepare for the next storm season.

As the Harbor Department has approved a shortening of scope for some of the vessels for the MBYC, it is recommended they report out to the HAB after the next storm season the outcome for those specific locations and if other location would benefit from a reduction in the scope of their anchor chain,