



MEETING MINUTES
Waterways Commission Meeting
Tuesday, March 27, 2018
NOAA Meeting Room
175 Edward Foster Road

Commission Members in Attendance: Fran McMillen (Chairperson), Brian Cronin (Vice Chairperson), Michael Gibbons, Brian Kelly, David Glancy, David Friedman, Steve Guard, Stephen Mone (Harbormaster), Michael LaRusso, Keith Walo

Commission Members not in Attendance: None

Also in Attendance: Chief John Murphy

The meeting was called to order by Fran McMillen at 5:34 PM

Fran McMillen asked for a motion to approve the agenda David Friedman made a motion to approve the agenda; seconded by Brian Kelly; Unanimous Vote (9-0).

The commission postponed approving the minutes from the March 7, 2018 until the next meeting.

OPENING REMARKS: Fran McMillen

Fran McMillen thanked Stephen Mone and Chief John Murphy for coming and presenting to the Commission.

Harbormaster Boat Request/Discussion

Chief Murphy said we have to provide the safest environment we can for the public and we are going to present what we think is the best solution.

The Harbormaster said he wants to collaborate with the fire department to improve fire protection and he further stated that we are looking for long-term solutions to accomplish this goal. We have tried to save money in the past. The boat we are looking to replace is an old Marshfield boat that the Town bought when it was at the end of its life.

Stephen Mone and Chief Murphy made a presentation on Improving Scituate Harbor Marine Safety Services:

The presentation focused on two options. *See Appendix A for full presentation*

Option A:

34' Calvin Beal

- Hull length 34'
- Beam 13'
- Draft 3'10"
- Power, inboard diesel
- Deck area 250 Sq. Ft.
- Fuel capacity 300 gals.
- Dry weight 16,500 lbs.

Option B:

28' Parker

- Hull length 28'
- Beam 9'6"
- Draft 18"up
- Power, Outboard twin gas Deck area 65 Sq. Ft. -- Need room to perform CPR, no triage area if a few people are injured.
- Fuel capacity 232 gal.
- Dry weight 6,400 lbs

Cost of ownership:

- Purchase price
- Yearly maintenance
- Fuel usage
- Life expectancy

Boat Fires in Scituate:

Tucker Patterson's Boat Fire Path was depicted in a slide. Chief Murphy said if it was in the middle of the summer and there was wind, but if there was more boats would have caught on fire and the lines could have burned off and then the burning boats would have floated out into the harbor

You Tube videos of boat fires were shown:

- Rockport
- Quincy Marina
- Marshfield

Operational Expectations:

- The need for a safe and functional work platform (250 feet)
- Firefighting ability: pump GPM & Foam
- De-watering capability
- Operational Flexibility: stable, speed, 75,000 foam tank

In Summary:

- The outboards need to be replaced every 5 years which is \$60,000
- Parker life expectancy is 15 years, the diesel engine is 37.5 years
- Calvin Beal cost of ownership over 30 years is less expensive
- There are limitations on gasoline boats
- We need to have heavy water and foam quickly and effectively
 - Need diesel engine to run the big pumps.

- 2,000 gallons a minute vs. 500 gallons a minute with gas engines
- This is a 30 – 40 year investment.
- There are limitations of Parker and Aluminum boats. Need a big deck space and capability to fight fires.
- They have received letters of support from the Marina owners in Scituate
- Marshfield paid \$420,000; 75% of which was matched by a grant
- Trying to protect boats, environment, and Town's revenue:
 - \$60M in boats to protect
 - We need a boat to protect people year round.
 - More and more people living on their boats
 - Very dangerous to fight a fire from the dock; very toxic the smoke is thick and black and it is hard to see.

Chief Murphy and the Harbormaster asked the Commission to consider what the best boat would be. It does not have to be a Calvin Beal, there may be something else more cost effective. We would take input from the boaters.

Questions and Comments from the Commission:

David Glancy:

Is there going to be some sort of collaboration between fire department and harbormaster; both Chief Murphy and Harbormaster said it would be a partnership. They would train together and share the boat. Fire, EMS and Dive would all work together.

So there would be official protocol? Stephen said there are procedures written at the Harbormaster's office on emergency operations. Typically, 911 is called first.

What about amortization, if the boat stays in water year round, currently the boats are only in the water 6 months. Chief Murphy said it will be used more, maybe another 50 hours. We need to match our challenges.

Brian Cronin:

Can you tell us about the fire pump and capacity in accordance with the RPMs. Chief Murphy said that the pump can flow up to 3,000 gallons per minute but 2,000 would be more realistic. The pump is a hale pump, just marinized with bronze fixings. It will have a 500-horse power diesel engine.

How fast would the RPMs have to go to have the ability to pump at 2,000 gallons a minute and how do you hold position? Brian's concern was that you have to crank up the diesel and you would not be able to maneuver the boat. Stephen said you could increase and decrease the flow without speeding up the engine with a flow control valve.

Brian's other concern was that the specs of the boat showed a 13ft beam and a 3ft.10 in. draft. He wanted to know how would you get through tight areas and low tides. Chief Murphy said we could get close enough to fight a fire with the capacity of the fire pump.

Did you look at aluminum boats, with a small diesel pump that you could attach to the boat that would have the ability to go into shallow water? Chief Murphy said we also have 2 other boats that we can use for shallow water and that aluminum boats were more expensive, but he would look into it as an option.

What about Jet drives, would this be an option to look into? **Michael LoRusso** thought they would be more expensive to maintain.

Brian Kelly:

Would this replace Unit 3 and are we planning to replace the pump out boat as well, what other boats are nearing end of life? Stephen said his fleet, other than Unit 3 and the pump out boat, were fine and that the \$56,000 Clean Vessel Act Grant would pay for most of the pump out boat and we would only pay an additional \$10,000 – \$15,000.

How are we paying for the cost of the boat, \$430,000? Debt service Stephen said, but he will apply for a grant. They are more difficult to get for boats than repairs for facilities because we are too far away to protect Boston or the Plymouth power station. According to Nancy Holt, it will be a 15 year finance plan of \$49,000 a year. Has anyone overlaid the other capital plans to see how it affects the long-term debt, Brian asked. Stephen said Nancy should have that information.

Chief Murphy apologized for not coming to an earlier meeting. He planned to come sooner but with the storms and one meeting being cancelled, he was not able to attend sooner.

Keith Walo explained how grants work and said we would have to come up with 25% of the boat cost.

David Friedman:

The objective is to replace the 3rd patrol boat, currently all 3 boats can all go to the same place, but with the larger boat you will be limited to where you can go. Stephen said presently, there are limitations as to where the smaller boats can go.

When it is a firefighting boat, how much equipment for firefighting is in the boat all the time, David asked? Stephen said it would be outfitted differently because it is a patrol boat day to day. It will contain short hoses, wrenches, nozzles and foam storage (a 75,000-capacity container which will last ½ hour). Small boats can bring out more foam if needed.

I would think the research would have led to comparing used boats maybe a 10 or 15 year old version -- has enough research been done to prove you cannot meet these need for less money? David's concern was that if Town Meeting approves the \$430,000 then we will spend that much money. Stephen said other Towns are paying the same or more. Used lobster boats generally are adapted for lobstering and would have to be completely revamped. If we can save money, we will Chief Murphy said.

Keith Walo:

Where will it be stored in the winter, Stephen said Cole parkway or Maritime in bad weather or in straps in extremely bad water.

Mike Gibbons:

The presentation was great, people have been talking about collaboration between departments and it would be great to get two departments working together to replace a boat that we need to replace anyway. Mike thinks they are the experts in what they need and that WWC should be supportive.

Steve Guard:

Would you have to raise the fees to fund this, Chief Murphy said that is not the plan. By leaving the docks in the water that will save money in the future. Steve also had concerns about maneuverability he said he would add a stern thruster to hold position.

Steve said he is in support after hearing the presentation.

Questions and comments from the audience:

Ernie Trowbridge said he has a boat like this and it can be maneuvered, turn the key and it goes. Never really has the need to use a mechanic.

Brad White thinks we need a 36-foot boat and should consider a West Bank. He felt we should not go with a Jet Drive and agreed that we do need a thruster. He also felt the maintenance numbers were light.

Mike McDonough asked if they had looked into a Twin Screw? It is more maneuverable and the pump could run off one of the engines. Chief Murphy said maybe that is an option and he would look into it so see if it is a cost effective option.

We have a ton of commercial traffic in Scituate; there might be a grant for this, Mike added.

Howie Kreutzberg thought it was an extremely well thought out presentation. He likes the collaborations efficiencies: divers, fireboat and a patrol boat. He wondered if we should vote to allocate money to buy a boat or keep repairing old boats.

Chris Carchia, Capital Planning Committee, we have been trying to look forward on purchases, we are purchasing new trucks for example instead of used trucks. We have gone through 30 years of patching old equipment. We need to be on a rotating maintenance schedule going forward.

Dave Dauphinee, I speak in support of this. My father passed away in the water, I ask what could have been done -- probably nothing in his situation, but we have to look at what we can do in other situations. I will speak for the other fishermen, this particular boat is top 3 and would be a solid investment, I think the pros outweigh the cons

John Dauphinee thought to go smaller would be ridiculous

Tucker Patterson, spoke in favor of the purchase of the boat.

Chief Murphy concluded by asking for the Commission's support in making the public safe.

Fran thanked them for coming to the meeting. Fran said they answered a lot of questions the Commission had.

David Friedman asked for a motion to vote for the approval to purchase a patrol boat equipped with fire hoses that would be shared between the harbormaster's office and the fire department, a motion was made by Fran McMillen, seconded by Michael LoRusso, Majority Vote in favor (9-1)

Brian Cronin recommended putting a captain door by the helm and Stephen asked him to send him an email.

There being no more business to discuss, a motion to adjourn was made by Fran McMillen at 7:17; seconded by Brian Cronin; Unanimous vote (9-0)

Respectfully submitted,

Lianne Cataldo
Recording Secretary

List of Documents:

- Agenda
- Meeting Minutes from 3/7/18
- Improving Scituate Harbor Marine Safety Services Presentation (Appendix A)
- List of written questions created by WWC

Follow Up:

- *Brian Kelly asked for a copy of the presentation*
- *Brian Cronin recommended putting a captain door by the helm and Stephen asked him to send him an email.*
- *Steve Guard recommended adding a stern thruster to hold position*
- *Next meeting currently scheduled for April 4, 2018 at the Maritime Center*

Appendix A

Improving Scituate Harbor Marine Safety Services

- Consolidating the existing aging Harbormaster boats to provide improved services
- Improve fire protection for recreational boaters, commercial fishing fleet, and marinas
- Work collaboratively with Scituate Fire to provide a platform for our trained dive team, EMS, and fire protection services
- Long term solutions

Where we tried to save money in the past

- Scituate Maritime Center, used Pilings
- Unit 3, Former Harbormaster boat Marshfield
- Used Pump-out boat
- Used 16' Inflatable boat

Replacement
Harbormaster Boat
Unit 3
34' Calvin Beal vs.
28' Parker

Specifications of

Option A	Option B
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34' Calvin Beal

- Hull length 34'
- Beam 13'
- Draft 3'10"
- Power, inboard diesel
- **Deck area 250 Sq. Ft.**
- Fuel capacity 300 gals.
- Dry weight 16,500lbs.

28' Parker

- Hull length 28'
- Beam 9'6"
- Draft 18"up
- Power, Outboard twin gas
- Deck area 65 Sq. Ft.**
- Fuel capacity 232 gal.
- Dry weight 6,400lbs.

34' Calvin Beal



28' Parker



Cost of ownership 30 years

Option A

Option B

34' Calvin Beal

- Purchase price, including fire pump and \$12,000 allowance for fire monitor*
\$430,000
- Yearly maintenance cost based on 400 hours of use per year i.e. oil changes, oil, fuel filters, *including items over and above normal maintenance*, average
\$ 1,000
15 yrs. \$15,000(5k)
30 yrs. \$30,000(10K)

28' Parker

- Purchase price including \$23,000 allowance for fire pump and monitor*
\$203,000
- Yearly maintenance costs based on 400 hours of use per year i.e. oil changes, oil, fuel filters, *not including items over and above normal maintenance*, average
\$ 4,000
15 yrs. \$ 66,000
30 yrs. \$132,000

Cost of ownership 30 years

Option A

Option B

34' Calvin Beal

- Fuel usage average, diesel based on \$2.69 per gallon
- 360 hours at low speed, 40 hours at cruise

per. yr.	\$ 3,500
15 yrs.	\$ 52,500
30 yrs.	\$105,000
- Life expectancy of engine 15,000 hrs. 37.5 years
- Life expectancy of boat, 40 years.

28' Parker

- Fuel usage average, gasoline based on \$3.50 per gallon
- 360 hours at low speed, 40 hours at cruise

per. yr.	\$ 11,500
15 yrs.	\$172,500
30 yrs.	\$345,000
- Engines replaced historically on average every five years, \$60,000
- Life expectancy boat, 15 years, replacement cost

\$203,000

Cost of ownership 30 year

Option A	Option B
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34' Calvin Beal

- 15 year cost of ownership
\$497,000
- 30 year cost of ownership
\$565,000

28' Parker

- 15 year cost of ownership
• *\$501,500/ \$704,500
- 30 year cost of ownership
\$1,013,000

Boat Fires in Scituate

Larry Deraney	1993
James Landing (\$6 million)	1999
2 rescued 1 fatality during this indent***	2005
Taylor Marine, Arson 3 boats	2012
James "Tucker" Patterson	2013
Robert Nihtila	2013
Taylor Marine	2017
Boat sank off the Glades, 16 people in water.	2013

Tucker Patterson's Boat Fire Path



Boat Fires

Rockport

- <https://www.youtube.com/watch?v=-4hNW1ZXRGY>

Quincy

- <https://youtu.be/tNfgQX24oXM>

Marshfield

- <https://youtu.be/6vhkjYXrbmw>

OPERATIONAL EXPECTATIONS

The need for a safe & functional work platform

- EMS
- Dive Team
- Hazardous materials spill
- Firefighting challenges: pump GPM & Foam
- Boat/Marina/fuel dock/waterfront structure
- Helo platform: Deck space for hoist
- Search and Rescue
- De-watering
- Operational benefits/limitations
- Need to match our challenges w/right equipment

SUMMARY

- Short term vs. long term solution
- \$60 million in property assets to protect
- Boat owners want/need this protection
- Make the investment in our Harbor, recreational & commercial boaters, marina owners, our waterfront businesses, & our majestic harbor
- Provide our First Responders with a safe, stable platform

We believe your worth the investment

We would like to thank the
Waterways Commission and the
Board of Selectmen