



Town of Harwich,
Massachusetts

October 2013

**Comprehensive Cost Recovery Plan for
Wastewater Implementation (CPWI)**

Executive Summary

**Prepared by:
Wastewater Implementation Advisory Committee**

Executive Summary

5.1 – The Challenge, the Solution

Harwich consists of five watersheds. These are land masses that each drain into a single body of water. In Harwich, these watersheds (and bodies of water) are Herring River, Pleasant Bay, Allen Harbor, Wychmere Harbor and Saquatucket Harbor. As these watersheds drain into our estuaries, bays and harbors, we need to control what drains into the watersheds to ensure the full estuary system remains healthy. Today, due to the drain from traditional Title 5 septic systems, there is too much nitrogen getting into the watersheds, which, in turn, brings too many nutrients into our bays and harbors. These nutrients cause growth that disturbs the balance for healthy embayment systems.

The state of Massachusetts has determined a daily threshold for the amount of nitrogen that can safely be drained into watersheds called Total Maximum Daily Loads (TMDLs), which we have exceeded in all of our watersheds. The problem is serious now, and it will only get worse as we continue to drain our waste through Title 5 septic systems.

For swimmers, boaters, lovers of natural beauty and those who appreciate the importance of balance in nature this is a matter to be taken very seriously.

After much study of several alternatives, it has been determined that a central sewer system that captures the necessary waste to return our watersheds to a proper balance is the best solution. That study is explained in the Draft Comprehensive Wastewater Management Plan (DCWMP), which was completed last spring and is being reviewed by the state's Massachusetts Environmental Policy Act (MEPA) and Department of Environmental Protection (DEP) and the Cape Cod Commission.

Understanding the problem and the solution may not be enough to implement the solution. The sewerage plan is projected to cost between \$180-230 million over the next 40 years. This is going to require the entire Harwich community to come together to fully understand the problem and the solution and in the end manage the funding needed to implement the project.

5.2 – Public outreach challenge

This leads us to a new challenge: A public relations challenge. We believe that the final CWMP (including this report) needs to be accompanied by a successful public outreach strategy to all Harwich voters including those less engaged today. The key to town-wide support is complete transparency in a strategic public outreach program. Part of this strategy should be to bring the CWMP before town meeting to be approved by the voting public.

It is good that the Cape Cod Commission has reached out to Harwich and offered their resources and funding to help with the outreach program. It requires strong leadership and a detailed plan to make certain that all of Harwich becomes informed and can make an educated choice going forward. The Commission will need Harwich leaders to help guide them even as we use their resources and funding.

The relationship with the Commission is especially important as they are working towards a regional wastewater solution for the entire Cape, and Harwich is already acting on a regional solution by using the Chatham treatment plant for the Pleasant Bay watershed and the Herring River plant can likely be regionalized with parts of Dennis. The county may also be very instrumental in securing future grants and low interest loans to help fund the project.

5.3 – The challenge of financial planning for sixty years

The DCWMP calls for eight phases over a forty year period to complete all the capital requirements. If bonding is required in the final phase, then it will take an additional twenty years to pay off – hence sixty years.

On the cost side, each phase anticipates a specific cost associated with the work that needs to be done during that phase. The costs for each of these phases is subject to change at any time as the results of each phase is measured, nature reacts to what has taken place, and we become more familiar with all the variables that will impact the costs. This type of management is appropriately named “adaptive management.” This is one reason it is difficult to have accurate projections over such a long period of time with so many variables that can affect costs. By working in 5-7 year phases adjustments can be made regularly.

On the revenue side, it is equally challenging to predict more than 7-10 years in advance. Having said that, we decided to look at all sixty years of revenue and expenses based on what we know today. We understand that revenues are as subject to change as costs such as changes in population base, construction pace, water use rates and so on.

Although our modeling does show all sixty years, we anticipate the first 10-15 years as being the most accurate. It will be the responsibility of the town’s financial leadership to track this each year and make the adjustments necessary to reforecast on an ongoing basis. Wisely, the Capital Outlay Committee works only seven years into the future as there are so many variables that can affect both costs and revenues from year to year. The Town Manager, Town Accountant, Board of Selectmen, Capital Outlay Committee and Finance Committee each will have their part of managing these projections as one phase leads into another.

5.3.1 – Additional Costs and Revenues

The DCWMP, as with most municipal finance projections, is using today’s dollar value through the entire project and does not adjust for any Cost of Living increases or inflationary predictions. We have continued that practice and have not anticipated any additional costs due to likely changes in costs of living throughout the life of the project.

Regarding additional revenues, we have fixed our fees and charges on today’s population base. While we anticipate more than 30 single family homes being built each year, we do not actually scale our revenues to show population increases from year to year in betterments, impact fees or taxes. We also have not included the betterment fees for subdivisions greater than 5 homes, apartments in a village center, commercial complexes, etc., whose betterment fee would be based on the costs of the Innovative Alternative septic system they would otherwise have to install by Board of Health regulations.

5.4 – Dedicated Wastewater Fund

The Wastewater Implementation Advisory Committee (WIAC) has worked hard to create a balanced and fair approach to funding the project and has created a cost recovery model that will save millions of dollars.

Our cost recovery model includes many sources of revenue:

- Betterments – a special fee just for those homes and businesses connected to the sewer equal to the cost of their savings for no longer maintaining or adding Title 5 or Innovative Alternative systems.
- Impact Fees
 - General fee for every Harwich property owner
 - Water surcharge fee
 - Construction fee
 - Occupancy hotel/motel rooms tax
 - Meals tax
- General Property tax

Together all of these fees and taxes will pay for the capital costs of the project. It is imperative that these revenues be dedicated to the wastewater capital costs.

1. WIAC RECOMMENDATION

We recommend the town establish a dedicated fund, to hold all capital revenues that cannot be used for any other purpose.

5.5 – Regulatory controls and legal implementation

Ultimately our recommendations will involve future decisions by various regulatory bodies. For example: The Planning Board to propose any zoning changes to town meeting; the Board of Health to define bedrooms in such a way that the Building department can enforce the rules; and so on. In addition, the town accountant, assessor and attorney may need to consider amending the town charter and filing legislation to amend the acts.

We have reviewed all of our recommendations with the relevant town staff for input into the final draft of this report including:

- ✓ Town Administrator (interim)
- ✓ Town Accountant
- ✓ Town Assessor
- ✓ Town Health Director
- ✓ Town Planner
- ✓ Natural Resources Officer
 - As well as CDM Smith - the consultant authoring the DCWMP
 - And the Coordinator of the Pleasant Bay Alliance
- ✓ Superintendent of the Town Water Department
- ✓ Director of Highways and Maintenance
- ✓ Town Engineer

Our report does not get involved in any of the specifics that each staff person might need to undertake to meet all of these recommendations. We feel this direction is best given by the Town Administrator or Board of Selectmen. We feel the staff are the professionals and will know the best way to handle each of their department's responsibilities.

5.6 – Recommended changes to DCWMP

This Comprehensive Cost Recovery Plan for Wastewater Implementation (CPWI) is a plan to financially implement the Draft Comprehensive Wastewater Management Plan (DCWMP). We have spent considerable time reviewing the DCWMP to see if there are any changes we might advise the Board of Selectmen (BoS) to make to the DCWMP. All of the recommendations we are making are intended to find a less expensive solution for the same sewer coverage throughout all of our watersheds. After all, the DCWMP states that its intention is “to develop the least expensive solution to meet the state Total Maximum Daily Load (TMDL) thresholds for our five estuaries.”

Here are our recommendations:

1. Section 1.1.1 – Lower the contingency factors

a. Understanding Contingency Factors

One thing you will read throughout the CPWI and DCWMP is that it is extremely difficult to predict what things will cost over a period as long as 40 years. You will also note that it is very difficult to predict how nature will react to the solutions we try as we move through the eight phases of the wastewater plan. Due to this, it is common to have high contingency factors (as high as 33%) built-in so that a town does not fall short of its financial requirements. Our DCWMP uses a contingency factor of 25%. Our research has shown us that contingencies of 20% are more than adequate. In addition, we feel it is reasonable to assume that new technologies will come forward in the near future to help mitigate the high costs of sewerage, and that we should further discount the contingency factor by 5%.

b. WIAC RECOMMENDATION

Anticipate that the true range of costs will not be \$180-230 million and instead plan for \$165-211 million. This is still a very substantial sum that will continue to be adjusted through the DCWMP’s Adaptive Management strategy.

2. Section 1.1.2 – Calculate commercial wastewater flow more accurately

a. Understanding “flow” calculations

There is a formula used to calculate the cost of wastewater that will flow from a building. That figure is based on the number of gallons per day (gpd) that are flushed out of the building. To measure commercial property, one measures gpd per 1,000 square feet. The Massachusetts Estuaries Project (MEP) has recorded these flows historically throughout our watersheds. As these are historic, they show the actual usages. In the East Harwich Commercial District, these historic usage numbers reflect an area heavily protected with protective water overlay districts including a District of Critical Planning Concern (DCPC), which severely limits business uses. The DCWMP does not anticipate that the presence of sewers will allow for commercial uses with greater wastewater needs – such as restaurants and lodging establishments.

b. WIAC RECOMMENDATION

We recommend that the flow calculation of 35 gpd/1,000 square feet be increased to a minimum of 95 gpd/1,000 square feet and that costs for this additional flow be calculated and included in the final CWMP.

3. Section 1.1.3 – Better Land Use Management/Controls

a. Understanding Build-Out

The Planning Department reports that if the town were to build all residential and commercial development as allowed under today’s zoning, we could build 2,233 dwelling units/residences (we have already built 10,836) and 2,703,914 more square feet of commercial space (we have already built 2,739,103).

It is understood that the sewer may allow for new development opportunities especially in higher density areas like village centers throughout the town, but the town must still be mindful to offset these increases in development so as to maintain the town’s character and natural resources while controlling infrastructure costs.

b. DCWMP allowances for more development

The DCWMP anticipates all of that development and also allows for an additional 250 dwelling units and 500,000 square feet of commercial space in East Harwich; and it allows for an additional 25% more wastewater flow from commercial development along Route 28 in Harwichport.

c. **WIAC RECOMMENDATIONS**

- i. **Initiate an effort through the Planning Board to rezone Harwich that will lead to no net-increase in development but will create greater densities and more contiguous open space.**
- ii. **We also recommend that these more densely populated areas allow for more affordable housing options than is currently available in Harwich.**
- iii. **Remove the additional commercial development above current zoning in East Harwich and Harwichport if the net effect is to increase development beyond current zoning.**
- iv. **We believe that today’s zoning allows for more than enough residential and commercial development in town for at least the next 50 years.**

4. Section 1.1.6 – Research the purchase of land for the Pleasant Bay recharge area

a. Understanding the Pleasant Bay recharge area

In the DCWMP, treatment of all waste from the Pleasant Bay Watershed is proposed to be done at the Chatham treatment facility and that eventually the clean water be piped back to be “recharged” into the Pleasant Bay Watershed. The land currently proposed by the DCWMP for this recharge area is within the “Six Ponds District,” designated as a District of Critical Planning Concern (DCPC). A DCPC has many restrictions on the use that can be made of that land. CDM Smith has informed us that they have not considered these potential restrictions when recommending this site for a recharge area.

b. **WIAC RECOMMENDATIONS**

- i. **The Town should get an official opinion from the Cape Cod Commission on whether a recharge area can be placed in the planned location as it falls within the Six Ponds DCPC area.**
- ii. **The Town should not make any purchases or guarantees of purchase until this opinion is complete and will allow for a recharge area**

5.7 – Economic, responsible and affordable growth

CDM Smith and the DCWMP state that \$25 million can be saved from wastewater capital costs if we were to limit our current potential growth by half. That is, instead of zoning for the 2,233 residences that can be built today, we could implement new zoning that would effectively limit that residential growth to 1,116 residences (and similarly with commercial growth) and we could save \$25 million in capital costs. While this would represent a substantial savings it would severely limit our population growth. A no-growth policy is a flawed policy.

The WIAC believes strongly in the economic and cultural vitality of Harwich. We believe in the kind of growth that will benefit the community, growth that:

- ✓ Welcomes a diverse population of many interests and backgrounds;
- ✓ Encourages residents to start businesses, and to locate their businesses and families in Harwich;
- ✓ Offers the types of jobs that are personally satisfying, well paid, with good benefits and that make Harwich a better place to live;
- ✓ Attracts people who respect our history and care about the preservation of our natural resources;
- ✓ Invites developers who understand our purpose and will build toward that goal;
- ✓ Brings new residents to town that will contribute their ideas, their time and their resources to making Harwich vibrant, exciting and attractive to residents and visitors.

This means adopting policies in town that will encourage this kind of growth. It means creating exciting places to locate a business. This includes some smart growth principles of creating village centers with a range of commercial choices and housing options with walkable neighborhoods, while preserving open space and our natural beauty throughout town.

We also believe that good growth is not simply adding to the population, it is adding to the community. After all, simply adding people for the tax revenue also adds a burden that is likely greater than the tax revenues such as costs for schools, police, fire and other town services. It is a net-loss proposition unless the growth we encourage benefits the community in other ways, especially economically. This responsible growth will bring much needed vibrancy to the community and more affordable and workforce housing options for current and future residents. The ability to build over two thousand new residences and hundreds of thousands of square feet of commercial space is more than enough, when coupled with responsible town wide policies, to create all of this exciting growth. Growth beyond that is costly, irresponsible and unnecessary.

5.8 – Grant opportunities - Section 1.2.1-1.2.4

Naturally, we considered grant money for funding wastewater as a high priority in our investigations.

- ✓ Federal Block Grants
- ✓ Rural Development Grants
- ✓ Federal Clean Water Act
- ✓ Massachusetts Bill H.690 – Pending legislation

Unfortunately, whether federal, state or county there are very limited funds available in any of the current grant programs. However, we feel it is critical that future wastewater and financial leadership of the town stay on top of these developments. History has shown us that funds can become available at any time, and we should be as prepared as possible. In all cases, a mature plan with well thought out solutions and community support has the greatest chance of being awarded a grant. So, it is important to move forward with plans to fund this through town revenues and take advantage of future grants should they become available.

5.9 – Low interest loans – Section 1.3.1 & 1.3.2

We identified two low-interest loan sources for wastewater:

- ✓ Rural Development Loans
- ✓ Massachusetts Clean Water State Revolving Funds (SRF)

The Rural Development Loan requires a rural population of less than 10,000 people, which Harwich exceeds. The SRF funds have several requirements outlined in section 1.3.2. While there may be some funds available at either 0% or 2% financing, they will be minimal, and we have not factored in any loans as sources of funding.

5.10 – Betterments, Impact Fees and Non-property Taxes

As we are not counting on any grants or loans, all of the money to fund the Wastewater plan must come from town resources – tax payers, residents, visitors, etc.

1. Section 1.3.2 – Betterment Assessments

a. Understanding Betterments

Massachusetts Department of Revenue defines Betterment as: *“A betterment or special assessment is a special property tax that is permitted where real property within a limited and determinable area receives a special benefit or advantage, other than the general advantage to the community, from the construction of a public improvement.”*

The WIAC approach to Betterments was to establish a betterment fee that was more or less equivalent to the costs that a single family home with a sewer would avoid over a 20 year period versus having a Title 5 septic system. This fee would also be equivalent to the costs that same property without a sewer would incur over a 20 year period. This will establish parity for the total costs incurred by sewer and non-sewered single family property owners.

b. WIAC RECOMMENDATIONS

- i. Single Family Homes: Assess a Betterment Fee of \$7,000 for properties that can be connected to the sewer.***
- ii. Subdivisions over 5 homes, apartments in a village center, commercial complexes, etc: Assess a Betterment Fee, to the developer, equal to the cost savings of the Innovative Alternative System that would otherwise have to be installed.***
- iii. The Betterment Fee would be assessed when the property is eligible to be connected.***
- iv. We recommend requiring property owners to connect to the sewer within one (1) year of it being available. The Board of Health can determine the need for exceptions to allow for more time.***
- v. Establish financing options for the Betterment Fee to minimize the impact on property owners.***
- vi. Funding Results –The financial contribution from this source of revenue is approximately \$52,798,550 (includes 20 year financing at 5% rates on total betterment fee of \$34,622,000) from single family homes, as shown in the Funding Matrix. This would cover between 22% and 29% of the project cost.***

2. Section 1.3.3.1-1.3.3.4 – Impact Fees

a. Understanding Impact Fees

We define Impact fees in two ways. The first are one time charges against new development to raise new revenue for new or expanded public facilities necessitated by new development. The second are annual fee charges representing a fee to compensate the town for its capital expenses with a time limit imposed on when the fee is removed. The WIAC looked at many possible impact fees and settled on the following recommendations:

b. WIAC RECOMMENDATIONS

i. New Residential Construction Fees

Establish a one-time fee structure for all residential construction – both new and remodeled – that adds a bedroom to the number of dwelling units in town as follows:

Residential Construction Fee Schedule	
Single Family/Home	\$18,000
Multi Family/Bedroom	\$6,000
Condo Type/Bedroom	\$6,000
Additions/Bedroom	\$6,000
Apartments/Bedroom	\$6,000

ii. New Commercial Construction Fees

- 1. Establish a fee for all establishments with bedrooms – hotels, motels, B&B's, rental cottages, nursing homes, assisted living complexes, etc. – of \$3,000.00 per bedroom, whether for new constructions or additions/modifications***
- 2. Establish a one-time fee on all other commercial construction – both new and remodeled – that is equivalent to \$3,000 per bathroom built.**

iii. Funding results for all residential and commercial construction fees

The financial contribution from this source of revenue is approximately \$48,984,000 as shown in the funding Matrix. This would cover between 20% and 27% of the project cost.

iv. All Parcels Flat Fee

- 1. Assess an annual Flat Fee of \$250 against all taxed parcels.**
- 2. Assess the annual Flat Fee for a period of 10 years.**
- 3. The fee would be assessed against all developed and buildable parcels; it would not be assessed against tax exempt or unbuildable parcels.**
- 4. Establish financing options for the Flat Fee to minimize the impact on property owners.**
- 5. Funding Results –The financial contribution from this source of revenue is approximately \$28,265,000, as shown in the Funding Matrix. This covers between 12% and 16% of the project cost.**

v. Water Bill Surcharges

1. Establish an annual surcharge on the water bill representing a 35% increase based on water use.
 - i. For residential use this would be an average of approximately \$50 semi-annual surcharge (\$100/year) on all Harwich water bills as soon as possible.
 - ii. For commercial use this would be an average of approximately \$118 semi-annual surcharge (\$236/year)
2. Establish a special fund for the additional receipts, dedicated to amortizing wastewater project capital costs.

Funding Results –The financial contribution from this source of revenue, over 40 years, is approximately \$40,776,459, as shown in the Funding Matrix. This would cover between 17% and 23% of the project cost.

3. Section 1.3.4.1 & 1.3.4.2 – Non-property taxes

a. Understanding Non-property taxes

This is a general category we created to represent new taxes that are not related to property taxes. Specifically there are two being recommended as increases over current taxes for lodging occupancy tax and meals tax. These two taxes will effectively impose a tax on visitors who are also responsible for wastewater discharge in our watersheds. The meals tax will also impact residents dining out.

b. WIAC RECOMMENDATIONS

a. Occupancy Tax Increase

1. Propose an increase to the local option room occupancy tax of 2% at the next Town Meeting.
2. Establish a special fund for the additional tax receipts, dedicated to amortizing wastewater project capital costs.
3. **Funding Results** –The financial contribution from this source of revenue, over 40 years, is approximately \$10,000,000, as shown in the Funding Matrix. This would cover between 4% and 6% of the project cost.

b. Meals Tax Increase

1. Propose a Home Rule petition to increase the local option meals tax to 1% at the next Town Meeting. This would be an increase of .25% as it is currently .75%.
2. Establish a special fund for the additional tax receipts, dedicated to amortizing wastewater project capital costs.
3. **Funding Results** –The financial contribution from this source of revenue, over 40 years, is approximately \$4,000,000, as shown in the Funding Matrix. This would cover approximately 2% of the project cost.

5.11 – General property taxes

All of the above recommended Betterments and Impact Fees are intended to bring a balance to who is paying for what for this project. We felt this was a fairer method than simply putting the full burden on the general property taxes where only tax payers would be paying and all based on the value of their property as opposed to the wastewater/water usage and other methods. Nevertheless, it is anticipated that over sixty years of capital costs and financing, we will still have some costs to cover through the general property taxes. The Revenue and Cost Flow Chart shows that this would not begin until well after accurate financial predictions can be made in the year 2043. Then between 2043 and 2072 (when all capital costs will have been recovered) the average increase on the average annual property tax bill will range from \$120-\$582.

1. Section 1.3.5 General Property Taxes

WIAC RECOMMENDATION

We recommend using the General Property Taxation method to recover capital costs as the last source of funds once all Betterments, Impact Fees, Non-property taxes, and Grants are fully implemented and collected.

5.12 – Sewer User Fees

All of the funding mentioned so far is to explain our recommendations on how we can recover all capital costs. The other costs that sewers bring are the costs borne by the sewer users. That is, annual Operations and Maintenance (O&M) costs and one-time hook-up or connection costs.

1. Section 1.3.6 Sewer User Fees

a. Understanding Operations & Maintenance Fees

These are the monthly fees paid based on the amount of water used and are for the general operations and maintenance of the wastewater system. These are not fees for capital costs.

b. Understanding Hook-up or Connection fees

This is a one-time fee to connect to the sewer at the street. There is a wide range of potential costs for this as it varies from distance to the street, terrain covered, and other complications. The average cost is estimated at \$4,424 per connection.

c. WIAC RECOMMENDATION

We recommend that both the O&M costs and the connection fees be costs passed on to those properties connected to the sewer and that financing be made available for the hook-up costs as needed.

5.13 – Revenue and cost flow chart

The following chart assumes we will finance our capital costs through 20 year bonds at 3%. Those payments are shown in each of the sixty years of the project (forty years for the project and an additional twenty years to pay off the final bond for phase 8). The next columns show the revenues in each individual year. The next two columns show the money being stored in the Dedicated Wastewater Fund and how that fund looks on an annual basis as well as the fund balance each year. The final column shows when/if the fund runs out and we need to tax residents on their annual property tax bill.

YEAR	ANNUAL BOND PAYMENT S	ANNUAL REVENUE				ANNUAL SURPLUS OR DEFICIT	FUND BALANCE	PROPERTY TAX IMPACT
		Betterments	Flat Fees	OTHER	TOTAL			
								\$4,391,786,550 = Base
								=
								11,306 Parcels
								(average tax impact per parcel)
2013	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2014	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2015	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2016	\$204,000	\$0	\$2,826,500	\$2,594,776	\$5,421,276	\$5,217,276	\$5,217,276	\$0
2017	\$200,175	\$0	\$2,826,500	\$2,594,776	\$5,421,276	\$5,221,101	\$10,438,378	\$0
2018	\$196,350	\$0	\$2,826,500	\$2,594,776	\$5,421,276	\$5,224,926	\$15,663,304	\$0
2019	\$192,525	\$0	\$2,826,500	\$2,594,776	\$5,421,276	\$5,228,751	\$20,892,055	\$0
2020	\$2,132,700	\$420,000	\$2,826,500	\$2,594,776	\$5,841,276	\$3,708,576	\$24,600,631	\$0
2021	\$2,092,425	\$409,500	\$2,826,500	\$2,594,776	\$5,830,776	\$3,738,351	\$28,338,983	\$0
2022	\$2,052,150	\$399,000	\$2,826,500	\$2,594,776	\$5,820,276	\$3,768,126	\$32,107,109	\$0
2023	\$2,011,875	\$388,500	\$2,826,500	\$2,594,776	\$5,809,776	\$3,797,901	\$35,905,010	\$0
2024	\$1,971,600	\$378,000	\$2,826,500	\$2,594,776	\$5,799,276	\$3,827,676	\$39,732,687	\$0
2025	\$1,931,325	\$367,500	\$2,826,500	\$2,594,776	\$5,788,776	\$3,857,451	\$43,590,138	\$0
2026	\$3,571,850	\$665,000	\$0	\$2,594,776	\$3,259,776	-\$312,074	\$43,278,064	\$0
2027	\$3,500,060	\$646,800	\$0	\$2,594,776	\$3,241,576	-\$258,484	\$43,019,580	\$0
2028	\$3,428,270	\$628,600	\$0	\$2,594,776	\$3,223,376	-\$204,894	\$42,814,687	\$0
2029	\$3,356,480	\$610,400	\$0	\$2,594,776	\$3,205,176	-\$151,304	\$42,663,383	\$0
2030	\$3,284,690	\$592,200	\$0	\$2,594,776	\$3,186,976	-\$97,714	\$42,565,669	\$0
2031	\$3,212,900	\$574,000	\$0	\$2,594,776	\$3,168,776	-\$44,124	\$42,521,546	\$0
2032	\$7,677,110	\$1,045,800	\$0	\$2,594,776	\$3,640,576	-\$4,036,534	\$38,485,012	\$0
2033	\$7,520,270	\$1,015,350	\$0	\$2,594,776	\$3,610,126	-\$3,910,144	\$34,574,868	\$0
2034	\$7,363,430	\$984,900	\$0	\$2,594,776	\$3,579,676	-\$3,783,754	\$30,791,114	\$0
2035	\$7,206,590	\$954,450	\$0	\$2,594,776	\$3,549,226	-\$3,657,364	\$27,133,751	\$0
2036	\$6,922,250	\$924,000	\$0	\$2,594,776	\$3,518,776	-\$3,403,474	\$23,730,277	\$0

YEAR	ANNUAL BOND PAYMENT S	ANNUAL REVENUE				ANNUAL SURPLUS OR DEFICIT	FUND BALANCE	PROPERTY TAX IMPACT
		Betterments	Flat Fees	OTHER	TOTAL			
2037	\$6,769,235	\$893,550	\$0	\$2,594,776	\$3,488,326	-\$3,280,909	\$20,449,368	\$0
2038	\$8,472,220	\$1,374,100	\$0	\$2,594,776	\$3,968,876	-\$4,503,344	\$15,946,025	\$0
2039	\$8,284,405	\$1,330,875	\$0	\$2,594,776	\$3,925,651	-\$4,358,754	\$11,587,271	\$0
2040	\$6,881,590	\$1,077,650	\$0	\$2,594,776	\$3,672,426	-\$3,209,164	\$8,378,107	\$0
2041	\$6,730,225	\$1,044,925	\$0	\$2,594,776	\$3,639,701	-\$3,090,524	\$5,287,583	\$0
2042	\$6,578,860	\$1,012,200	\$0	\$2,594,776	\$3,606,976	-\$2,971,884	\$2,315,700	\$0
2043	\$8,123,495	\$1,434,475	\$0	\$2,594,776	\$4,029,251	-\$4,094,244	\$0	\$362
2044	\$7,940,330	\$1,390,375	\$0	\$2,594,776	\$3,985,151	-\$3,955,179	\$0	\$350
2045	\$7,757,165	\$1,346,275	\$0	\$2,594,776	\$3,941,051	-\$3,816,114	\$0	\$338
2046	\$6,523,500	\$1,148,175	\$0	\$2,594,776	\$3,742,951	-\$2,780,549	\$0	\$246
2047	\$6,371,850	\$1,111,775	\$0	\$2,594,776	\$3,706,551	-\$2,665,299	\$0	\$236
2048	\$9,996,200	\$1,607,375	\$0	\$2,594,776	\$4,202,151	-\$5,794,049	\$0	\$512
2049	\$9,773,750	\$1,557,675	\$0	\$2,594,776	\$4,152,451	-\$5,621,299	\$0	\$497
2050	\$9,551,300	\$1,507,975	\$0	\$2,594,776	\$4,102,751	-\$5,448,549	\$0	\$482
2051	\$9,328,850	\$1,458,275	\$0	\$2,594,776	\$4,053,051	-\$5,275,799	\$0	\$467
2052	\$6,271,400	\$1,163,575	\$0	\$2,594,776	\$3,758,351	-\$2,513,049	\$0	\$222
2053	\$8,846,000	\$1,872,325	\$0	\$2,594,776	\$4,467,101	-\$4,378,899	\$0	\$387
2054	\$8,657,750	\$1,816,220	\$0	\$2,594,776	\$4,410,996	-\$4,246,754	\$0	\$376
2055	\$8,469,500	\$1,760,115	\$0	\$2,594,776	\$4,354,891	-\$4,114,609	\$0	\$364
2056	\$8,281,250	\$1,704,010	\$0	\$0	\$1,704,010	-\$6,577,240	\$0	\$582
2057	\$8,093,000	\$1,647,905	\$0	\$0	\$1,647,905	-\$6,445,095	\$0	\$570
2058	\$6,744,750	\$1,336,300	\$0	\$0	\$1,336,300	-\$5,408,450	\$0	\$478
2059	\$6,591,300	\$1,292,970	\$0	\$0	\$1,292,970	-\$5,298,330	\$0	\$469
2060	\$6,437,850	\$1,249,640	\$0	\$0	\$1,249,640	-\$5,188,210	\$0	\$459
2061	\$6,284,400	\$1,206,310	\$0	\$0	\$1,206,310	-\$5,078,090	\$0	\$449
2062	\$6,130,950	\$1,162,980	\$0	\$0	\$1,162,980	-\$4,967,970	\$0	\$439
2063	\$4,917,500	\$892,150	\$0	\$0	\$892,150	-\$4,025,350	\$0	\$356
2064	\$4,795,850	\$860,195	\$0	\$0	\$860,195	-\$3,935,655	\$0	\$348

YEAR	ANNUAL BOND PAYMENT S	ANNUAL REVENUE				ANNUAL SURPLUS OR DEFICIT	FUND BALANCE	PROPERTY TAX IMPACT
		Betterments	Flat Fees	OTHER	TOTAL			
2065	\$4,674,200	\$828,240	\$0	\$0	\$828,240	-\$3,845,960	\$0	\$340
2066	\$4,552,550	\$796,285	\$0	\$0	\$796,285	-\$3,756,265	\$0	\$332
2067	\$4,430,900	\$764,330	\$0	\$0	\$764,330	-\$3,666,570	\$0	\$324
2068	\$1,949,250	\$466,375	\$0	\$0	\$466,375	-\$1,482,875	\$0	\$131
2069	\$1,898,400	\$447,720	\$0	\$0	\$447,720	-\$1,450,680	\$0	\$128
2070	\$1,847,550	\$429,065	\$0	\$0	\$429,065	-\$1,418,485	\$0	\$125
2071	\$1,796,700	\$410,410	\$0	\$0	\$410,410	-\$1,386,290	\$0	\$123
2072	\$1,745,850	\$391,755	\$0	\$0	\$391,755	-\$1,354,095	\$0	\$120
TOTALS :	\$302,528,900	\$52,798,550	\$28,265,000	\$103,791,051	\$184,854,601			

5.14 – Wastewater management structure

One of the most important questions to address, once a central sewer system has been deemed necessary and when the funding has been approved, is to determine how the management of this new, large and important service in town will be structured.

1. Section 3 – Future Organizational/Management Structure

Since the DCWMP is still in its review stages and then should receive significant public outreach including adoption by Town Meeting, we are still a long ways from approval for the project. As the completion of the project can change so much during the start-up years, WIAC recommends that the Town maintain as much flexibility as possible. Rather than set a precedent by having a structured and staffed department, WIAC recommends that we out-source this management responsibility and contract with an individual or firm to fill the role for at least the first several years of the program and likely through 2028, when we still have so few users of the system and when construction begins on the HR-12 treatment plant in the Herring River watershed.

a. WIAC RECOMMENDATIONS

- a. The WIAC recommends that the town hire an outside qualified person (not as a town employee) or contracted firm in charge of the project (Project Manager) who is not burdened with managing other Town departments or town politics and is responsible to the Town Administrator or BOS when Town Administrator is unavailable. The project is too costly to have it suffer from management time constraints, which might occur if either the Highway Department or Water Department were given this assignment. However, during the startup years, there will most likely be “lag” times in the project due to a variety of reasons including everything from regulatory approval to funding issues to construction delays.**
- b. Certainly Harwich will have its consulting firm CDM Smith involved, who will be able to work well with the Project Manager. We do not want a highly paid Town-employed manager sitting idle during lag times, but having a wholly qualified party representing Harwich’s interests alone would be extremely desirable.**
- c. We do not believe this function can be accomplished by a combination of a committee working with CDM as that method would seem to have some inherent risks in terms of the committee members’ qualifications as well as the responsibility and clear authority to deal with the public, the regulatory agencies and the construction issues. It would seem more prudent, despite the cost of the position, to have a committee in place to support the Project Manager as well as to be available for continuing public education/outreach and advice as the project advances.**

5.15 – Conclusion

This Cost Recovery report represents a unique way of considering how to finance the town’s most expensive single project in its history. In our deliberations, we considered as many opposing views as possible so that we could craft something that might address each side:

- | | | |
|---------------------------------|----|--|
| ➤ Those on the sewer | vs | Those remaining on Title 5 systems |
| ➤ Large property owners | vs | Small and single lot property owners |
| ➤ Wealthy residents | vs | Moderate and disadvantaged residents |
| ➤ Taxpaying properties | vs | Tax exempt properties |
| ➤ Properties on town water | vs | Properties on private wells |
| ➤ Large users of town water | vs | Small users of town water |
| ➤ Residential development | vs | Commercial development |
| ➤ Residents | vs | Visitors |
| ➤ Frequent users of restaurants | vs | Infrequent users of restaurants |
| ➤ Property already developed | vs | Property to be developed in the future |
| ➤ Economic development | vs | No growth advocates |
| ➤ Advocates for open space | vs | Advocates for maximum development |
| ➤ Properties in dense areas | vs | Remote Properties outside town centers |
| ➤ Properties in our watersheds | vs | Properties outside our watersheds |

In the end, as in the beginning, we recognized that every one of these groups is responsible for the excess nitrogen (or future nitrogen) draining into our watersheds, and every one of these groups will benefit by having healthier estuary systems with the future of our harbors and bays looking brighter.

This assortment of fees and taxes involves all of those above. The prospect of having to fund a project of this magnitude can seem overwhelming and can cause anger, resentment and divisiveness in a small community like Harwich. We know our neighbors well, we know the people with whom we do business, we know our elected and appointed officials, and we all want to be treated fairly. When everyone understands the reason for the project and understands that no one is exempt from paying their share of the expenses, then, perhaps, we can all agree on a solution such as proposed in this document.

Respectfully submitted,

The Wastewater Implementation Advisory Committee

WIAC Committee:

- | | |
|-------------------|---|
| Hugh Drummond | – Representing the Harwich Tax Payers Association |
| Danette Gonsalves | – Representing the Water Quality Task Force |
| Chris Harlow | – Representing the Capital Outlay Committee |
| Ted Nelson | – Chairman |
| Bob Steiner | – Clerk |
| Allin Thompson | – Representing the Harwich Water Department |

Liaison and Staff members:

- | | |
|------------------|---|
| Noreen Donahue | – Liaison to the Finance Committee |
| Larry Ballantine | – Liaison to the Board of Selectmen |
| Dave Ryan | – Town Accountant and Staff support |
| Jim Merriam | – Ex-Town Administrator and Staff support |

Special thanks to:

Val Peter, Frank Sampson and Pete Watson for their early service on the committee