



# City of Virginia Beach

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September 10, 2010

The Honorable Mayor  
and Members of City Council

**Subject: Neighborhood Dredging Special Service District Policy Report**

Dear Mayor and Councilmembers:

At the request of the Old Donation Creek Waterway Association (ODCWA) and endorsed by District Councilman and Vice Mayor Louis Jones, the staff has worked diligently over the last eighteen months to resurrect and develop a partnership between the City and the neighborhood waterfront property owners to create a Special Service District. Attached is a Policy Report which provides the consensual agreement for neighborhood dredging projects which will accomplish two very significant initiatives: 1) The ability of our residents to recapture their access to navigable channels in the Lynnhaven and 2), to attack the number one cause for the degradation of the Lynnhaven's water quality - siltation of the sandy bottom.

Using ODCWA as a real project example, this Policy Report lays out the project segments, engineering and construction, and the funding necessary to bring a long sought after solution to assist our citizens.

As we have scheduled a briefing for this coming Tuesday, September 14, I encourage you to review the attached document and to bring it to the Council session as we will cover the concepts in detail.

Should you have any questions please do not hesitate to contact Dave Hansen or me.

With Pride in Our City,



James K. Spore

JKS/DLH/s

Attachment

c: Mark Stiles  
Dave Hansen



## Policy Report Neighborhood Dredging for Old Donation Creek

September 10, 2010

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### **Background:**

For well over a decade, the difficulties of removing accumulated sediment have negatively impacted our waterfront homeowners' ability to optimize the use of their property and to reclaim necessary navigation channels within the Lynnhaven River. Water quality and habitat have also been severely impacted due to the siltation of the bottomland of the City's most precious water resource. Removal of these shoaling sediments (silts, clays and organics) will have a very positive multi-beneficial effect; however, this is a very complex issue to organize and work-out cost participation agreements among private landowners.

The City has seriously investigated this issue on two occasions. In 1997 a consultant was retained to perform a citywide analysis of neighborhood dredging requirements. Various funding strategies were evaluated and the recommendations included an initiative to create a Special Service Tax District (SSD) for all waterfront properties adjacent to the Lynnhaven. Unfortunately, the schedule for this single dredging effort, funded by the additional real estate tax revenue, exceeded a 10 year time frame. As a result, this initiative was not carried forward. In 2004, City Council asked for another review of alternatives. In response staff prepared a series of four briefings for Council in 2005, which concluded with a summary of four alternative programs. These included a status quo (do nothing new) alternative, two alternatives of cost sharing with neighborhoods, and a fully funded City-run alternative. No formal guidance from Council was received.

Over the last two years, City staff has been responding to the Old Donation Creek Waterway Association's requests via discussions regarding how they might partner with the City to accomplish navigation dredging to regain deep water access. Staff has attended meetings with this specific neighborhood in order to discuss ways of developing a strategy to work with the homeowners to undertake this endeavor. As part of these discussions the neighborhood working group for Old Dominion Creek Waterway Association submitted to City staff on March 18, 2009, written confirmations from 48 of the adjacent 66 properties. These confirmations were letters of intent to have a Special Service District (SSD) established for maintenance dredging on/adjacent to their properties within the Old Donation Creek tributary of the Western Branch of the Lynnhaven River.

The purpose of this Policy Report is to discuss policy options with the City Council regarding the feasibility of developing a Special Service District supporting neighborhood requests. In order to make this concept more easily understood, we have incorporated within this policy report a site specific neighborhood request related to Old Donation Creek. Throughout this policy report we will provide an evaluation and recommendation which may or may not lead to a City Council ordinance establishing an SSD specifically for Old Donation Creek owners. This policy report is intended to establish a framework by which follow-on neighborhood requests could be evaluated and individual neighborhood dredging project reports would be forwarded to City Council for approval in establishing their respective SSDs. Should City Council concur with the policy report recommendations leading to the establishment of neighborhood SSDs staff could proceed with processes requiring the commitment of the individual neighborhood property owners to enter into a dredging cost participation arrangement for administering and carrying out separate neighborhood dredging projects.

**Legal Considerations:**

In accordance with Virginia Code Section §15.2-2403, after adoption of an Ordinance creating a Special Service District, the governing body has the power to construct, maintain, and operate such facilities necessary to provide government services within the service district pertaining to the dredging of creeks and rivers to maintain existing uses.

Enclosed in Attachment A is a listing of all 66 potential SSD property owners reflecting their addresses, the most recent FY11 assessments, and identification of those who provided letters of intent supporting establishment of the Old Donation Creek neighborhood dredging SSD. The district includes all properties where connection to the navigation channel appears to be viable. Attachment B presents a map which depicts the City and SSD neighborhood channels along with the corresponding SSD properties.

For the Old Donation Creek neighborhood application, forty-eight of these sixty-six properties represent 73% of the possible Special Service District currently in support of this initiative. Virginia Code requires at least 51% property owner approval as a minimum threshold before the City Council will consider a neighborhood request. The City Council has the authority to designate what percentage of neighborhood approval they would like to establish before considering approving neighborhood dredging SSD request. As an SSD is an additive real estate tax, City Council may choose to set the participation percentage higher than the Code required 51% of adjacent properties for establishing an SSD before consideration of an Ordinance creating the neighborhood navigation channel dredging district can occur.

**Scope of the Navigation Channel Dredging:**

In the context of providing enhanced navigation to neighborhoods there are three distinct types of channels: those that can be considered a City responsibility, those that are the responsibility of the collective neighborhood, and, 'private' channels and dock basins serving individual properties. The main channel in the Western Branch has historically been maintained by the City of Virginia Beach.

In that a 'spur', or lead channel, off of the main Western Branch channel at this location will or could serve more than one neighborhood, and under the assumption that the neighborhoods will

fund their collective channel or channels, a case can be made that the extension of a multi-neighborhood channel off the main channel could be the responsibility of the City. It is anticipated that a spur channel to serve the Pembroke Shores-Donation Shores-Saw Pent Point-Old Donation Farms neighborhoods would be 20 feet wide with a depth of four feet below mean low water.

Over the last decade, there have been a myriad of neighborhoods who have attempted to form a coalition in order to conduct sediment removal within their neighborhood coves. For those that have accomplished this, it has been a very demanding and time consuming effort and, in many cases, not resulted in the end state desired. For many desiring neighborhoods the actual conversion from words to deeds has never transpired. The construction costs, regulatory permitting, long term neighborhood commitment and administration and management of dredging initiatives are too complex. There are at least a dozen neighborhoods that would be interested in the planning and organizing a dredging project. City Council approval of these navigation channel dredging SSDs would require the City to commit to the dredging of the adjacent spur channels. In the case of Old Donation Creek, approximately 21% of the combined community and City spur dredging requirements would be the sole responsibility of the City. It is expected that as the neighborhood dredging cooperative projects are approved, City Council would support them through a Capital Improvement Project process. Funding for this CIP project would of course, utilize General Fund revenues either through debt or PAYGO (pay-as-you-go).

With the spur provided at City expense, it is anticipated that the Old Donation Creek SSD would fund the construction of a common channel serving the residents within that neighborhood. This neighborhood channel would be sized to serve the navigational needs of the residents with respect to depth and width, balanced against environmental impacts and the ability to obtain permit authority to dredge. At this point it is assumed the neighborhood channel system would be 20-feet wide with a depth of four feet deep below mean low water.

Individual channels will be funded by each property owner wishing to connect to the neighborhood channel. These channels and basins will vary in geometry, depending on the property owners needs for draft and turning space. For the purposes of this report, and given that two-way traffic will not likely occur within these channels, it is assumed that all individual channels will be dredged to a width of 10 to 15 feet and a depth of four feet below mean low water. The basins for each individual channel will generally include both the docking space footprint and an adequate area to turn and maneuver the host vessel(s).

**Dredge Material Transfer Site, and Transport Impacts:**

Given the lack of available dredged material disposal areas for hydraulic dredging, the dredging of these channels would be accomplished by the mechanical dredging method. In brief, the channels will be dredged using a barge mounted excavator, with the dredged material being loaded onto barges (“scows”) for transport to a transfer station where the material will be offloaded into trucks for transport to an upland disposal area.

City Council has received, on several occasions, briefings which have displayed the need to establish five dredge material transfer sites throughout the Lynnhaven Watershed for the purpose

of supporting mechanical dredging projects. Inasmuch as the majority of the Western Branch main channel dredging project will take place south of Hebdon Cove, a transfer site near Virginia Beach Boulevard is currently under design and permit approval process underway. This site could be made available for the proposed Old Donation Creek SSD project; however the distance to the proposed Virginia Beach transfer station may present an economic hardship. Two alternatives exist that could be explored.

The first potential alternative is the community-owned tract on Old Donation Creek, area east of 1057 Saw Pen Point Trail (Water Tower site). The use of this site would require that the trucks transporting the dredged material transit the interior roadways of Witchduck Point en route to the disposal area. In addition, there may be wetlands impacts associated with its use that may preclude its selection. The second alternative is to utilize a portion of the Dredged Material Management Area on Crab Creek, adjacent to the Lynnhaven Boat Ramp and Beach Use Facility. While the second site has no wetlands impacts and a more direct truck route to a primary road, the communities near the boat ramp have previously opposed the use of this site for a transfer station.

In summary, of the three potential sites for use as a transfer station, one would involve potentially higher transit costs, the second would involve wetlands and neighborhood impacts, and the third could face opposition from Shore Drive communities.

**Dredge Material Disposal:**

One of the most significant problems facing any proposal for dredging is an adequate and acceptable location to dispose of the dredged material. Fortunately, the City has been proactive in securing a long-term upland disposal site for mechanically dredged material – the former Whitehurst Borrow Pit on Oceana Boulevard. City Council has authorized the use of this site by private parties within Virginia Beach for the disposal of dredged material. In addition, staff has recently received full permit authority from the Corps of Engineers and the Department of Environmental Quality for this purpose. Accordingly, it is anticipated that the former Whitehurst Borrow Pit will be utilized for this endeavor.

**Adjacent Property Tax Assessment Data:**

A table is included on Attachment A that lists the Fiscal Year 2011 assessed value for each property within the proposed SSD. The total FY11 assessed value for the 66 properties adjacent to the Old Donation Creek Neighborhood dredging project is \$43,012,700.

**Right-of-Way/Bottomland Easement/Voluntary Dedication Considerations:**

Inasmuch as the platted limits of many properties surrounding Old Donation Creek extend to the centerline of the waterway, it will be necessary to obtain construction and right of way easements for the neighborhood SSD channel. It is anticipated that a condition for the creation of an SSD will be voluntary dedication of the necessary easements. It should be noted that even with voluntary, non-compensated, dedications there are still costs associated with the needed acquisitions, including title searches, plat and document preparation, and recordation. Accomplishing these tasks will take several months to complete.

**Environmental and Permit Considerations:**

A thorough evaluation of wetlands impacts will be necessary to obtain the required environmental permits for this proposal. This detailed assessment will occur during the design stage of the proposal. The channel locations will be selected using the criteria of avoiding wetlands impacts where possible, minimizing impacts if avoidance is not possible, and mitigating any unavoidable impacts to vegetated wetlands. These constraints may result in properties fronting Old Donation Creek being discounted from the potential SSD due to extensive vegetated wetland impacts that would prevent them from being connected to the neighborhood channel. Should they wish to construct extra-long piers individual homeowners will be responsible for obtaining their permits. In these cases, we would encourage multiple families to cost share the use of a single pier to a multi-vessel dock positioned adjacent to the neighborhood channel.

**Initial Estimate of Project Costs:**

The costs for developing and implementing this proposal include survey and design, permit acquisition, bid document preparation, construction administration, real estate (easement) dedications, actual construction, periodic monitoring, and annual maintenance of navigation markers.

The preliminary channel layout includes approximately 1,200 feet of City-funded spur channel and 4,650 feet of SSD funded neighborhood navigation channel. A hydrographic survey of Old Donation Creek was conducted by Langley & McDonald, P.C., in 2008. Based on that survey and the anticipated channel widths and depths, it is estimated that the City-funded spur channel would require approximately 2,667 cubic yards of dredging, and that the neighborhood SSD-funded channel would involve approximately 10,333 cubic yards of dredging.

The cost for mechanical dredging, scow transport, material transfer, trucking and disposal is currently estimated at \$30 per cubic yard. Accordingly, it is estimated that construction costs alone will be approximately \$80,000 for the City-funded channel and \$310,000 for the neighborhood SSD channel. With the projected cost of fuel and labor expected to rise, a 5% cost escalation per year should be applied for the second and third dredge cycles.

The cost for dredging individual channels and basins will vary widely, depending on existing water depth, distance to connect to the neighborhood channel, and the size and geometry of the turning basin. This work could be more expensive than open channel dredging as working around and near dock structures and mooring pilings may be less productive and increase the risk of damage to structures. It is estimated that the cost for construction of each individual channel and basin, to be funded entirely by the individual property owner, will range from a low of \$5,000 to as much as \$20,000 for their initial dredging.

Surveys, design, permit acquisition, bid document preparation and construction administration for smaller scale navigation projects typically runs 20% of construction. Assuming that no significant issues arise, it is assumed that easement acquisition could be accomplished within this amount.

Accordingly, it is estimated that these 'overhead' items would be approximately \$20,000 for the City-funded portion of the work, approximately \$60,000 for the neighborhood SSD-funded portion of the work, and approximately \$1,000 to \$4,000 for each individual channel.

Both the City-funded spur channel and the SSD-funded neighborhood channel will require adequate marking for safe navigation. It is estimated that three markers will be needed along the City spur channel, and as many as nine markers will be needed along the network of SSD neighborhood channels. Installation of these markers is estimated at \$2,000 each. This equates to an estimated additional \$6,000 (three markers) of upfront City construction costs, and \$18,000 (nine markers) for the SSD funded channels. Regular maintenance and replacement of these navigation aids will be required, and should be budgeted at 10% of installation costs annually. Individual property owners may elect to have private aids installed for the longer individual channels; those costs would be borne directly by the property owner.

The total project costs include design and construction plus 20% for survey, permitting, contracting and construction administration as well as navigation aid installation. The initial dredging is estimated to cost \$492,000, with the City and Community portions as follows:

- City portion: \$ 103,212
- SSD portion: \$ 393,588
- Individual channels: \$6,000 to \$24,000 each, with an average of \$12,000 for each participant.

**Project Construction Timeline:**

Surveying, design, permit acquisition and bid document preparation for navigation projects can normally be accomplished in 12 to 18 months. Easement acquisition can be accomplished concurrent with those activities. Bidding and contract award consumes a four month period. Accordingly, it is estimated that construction could commence 16 to 22 months from the establishment of the SSD. For planning purposes, construction of the City and neighborhood segments with 13,000 cubic yards of dredging, and up to 66 individual basins, is estimated to take 12 months.

It is important to note that some navigation dredging permit actions have taken more than 2 years to complete. Furthermore, the time to accomplish real estate acquisition is also highly variable. All easements must be obtained prior to construction; one unresolved title defect, or reluctant owner, could slow the entire project.

It is estimated that construction commencement could reasonably occur within 2 years following the approval of a City Council Ordinance establishing the SSD.

**Dredging Cycles:**

The SSD should be in place for at least three dredging cycles due to additional stormwater siltation and the sluffing of the sides in filling the box cut created by mechanical dredging. After three cyclic dredging efforts this sluffing effect is expected to be significantly reduced thereby creating a relatively stable channel system. The first dredging will require the largest effort. As stated before, the City and neighborhood channels amount to 13,000 cubic yards.

As the Lynnhaven waterfront is nearly fully built-out, the siltation rate has significantly slowed. The current projection is that the second dredging should be scheduled seven years following completion of the initial effort. This second dredging should involve a reduced quantity. This second dredging is anticipated to only require the removal of 70% of the original quantities. The third dredging, 14 years after the first, should only require the removal of 50% of the original dredged amount. These percentages are based on the estimated side sluffing which will occur over time. Establishing a three dredge cycle and the periods between them are key to establishing the funding schedule for the cost participation agreement.

Some discussion is likely to occur with the neighborhood applicants regarding the frequency of the dredging cycles; specifically with a focus on reducing the annual SSD costs by spreading out the period of the dredging cycles. Of concern would be the condition created whereby the follow-on dredge cycles have been spaced so far apart that the navigation channels have become impacted prior to the funding schedule creating necessary equity in accordance with the SSD ordinance. We have established the dredge cycle period to be seven years in order to assure the neighborhoods that the second and third dredge cycles will occur in a timely manner so as to ensure continuous navigable use of the channels. Extending the period would create risks to the neighborhoods as well as to the City to accelerate the follow on dredging prior to funding levels being accumulated.

**Community Channel Dredging Cost Estimate:**

Using the frequency and quantity assumptions above, it is anticipated that the SSD rate (¢ per \$100 assessed valuation) should be established to fund 100% of the neighborhood costs through the third dredging. Applying a 5% annual cost escalation, this means dredging costs are \$30 per cubic yard cost in the first cycle; \$40.20 per cubic yard seven years later; and \$56.47 per cubic yard in the third cycle.

With the initial dredging of the neighborhood channel consisting of 10,330 cubic yards dredged, the second dredging will require the removal of 7,233 cubic yards, and the third dredging in year 16, the removal of 5,167 cubic yards. The costs of these three dredging efforts are:

Dredge Cycle	Cubic Yards*	Costs/Cubic Yard**	Cost ***
1	10,330	\$30.00	\$ 393,588
2	7,233	\$40.20	\$ 348,920
3	5,167	\$56.57	\$ 350,757
<b>TOTAL</b>	22,730	Average \$42.25	\$1,093,265

- \* Assumes a 3 foot dredge depth to -4 feet below mean low water
- \*\* Assesses a 5% yearly cost escalator
- \*\*\* Includes 20% design and administrative cost for each dredging and the navigation aids in the first year dredging

Due to fluctuating real estate values, no change in assessed value is incorporated. The current FY11 assessed value of the 66 properties is \$43,012,700. It is expected the first dredging will not occur until two years of SSD collection have occurred.



Therefore, the total SSD period will be 16 years at a rate of 15.9¢ per \$100 assessed valuation. The SSD is projected to cover the entire cost of three dredging events over a 16 year period; however since the initial cost and timing of the first dredging will exceed the pace of SSD collections in years 3, 4, 5, and then again in years 9 and 10 for the second dredging, the General Fund may have to supplement the first two dredgings provided the SSD reimburses the General Fund for the portion of the SSD neighborhood channel dredging it supplemented. A spreadsheet displaying the SSD annual taxes generated, the cumulative SSD amounts, and the dredging costs is shown in Attachment C. This annual SSD rate can be adjusted, and it is recommended this rate be reviewed every four years during the life of the SSD.

At \$43,012,700 assessed value for the 66 properties, each 1¢ raises \$4,301. At the end of the 16<sup>th</sup> year, and prior to the third dredging, the SSD would have to collect \$1,093,265, subject to cost estimates and assessment adjustments. All funds collected via neighborhood SSDs would be accounted for in separate SSD fund accounts. The additional SSD rate for this neighborhood will sunset after the 16th year unless renewed.

**City Channel Dredging Funding:**

City appropriations would be made on an annual basis in amounts determined by the project cost and the frequency of dredging. For the Old Donation Creek cost participation project, the City portion of the spur channel dredging is:

Dredge	Cubic Yards*	Costs/Cubic Yard**	Cost ***
1	2,667	\$30.00	\$ 103,212
2	1,867	\$40.20	\$ 90,064
3	1,334	\$56.57	\$ 90,557
<b>TOTAL</b>		Average \$42.25	\$ 283,833

- \* Assumes a 3 foot dredge depth to reach -4 feet below mean low water
- \*\* Assesses a 5% yearly cost escalator
- \*\*\* Includes 20% design and administrative cost for each dredging and the navigation aids in the first year

Also shown on Attachment C is the appropriation schedule for annual budgeting through year 16 of the project. This funding schedule covers the City portion of the three dredging as well as the advanced funding necessary to supplement the neighborhood SSD for the first two dredging. Because the neighborhood SSD is required to fully fund their portion of the three dredging cycles, the City appropriation in the out years is significantly less.

**Combined City and SSD Channel Dredging Funding:**

A Community Dredging CIP would be created to account for all dredging cost participation projects. The combined total of funding for the City and SSD portions of the Old Donation Creek neighborhood dredging project are:

Dredge	City (20.6%)	SSD (79.4%)	Total
1	\$103,212	\$393,588	\$496,800
2	\$90,064	\$348,920	\$438,984
3	\$90,557	\$350,757	\$441,314
<b>TOTAL</b>	\$283,833	\$1,093,265	\$ 1,377,098

**Future Actions Required:**

The finalization of this policy report will initiate several follow-on actions necessary for the City and Old Donation Creek neighborhood to accomplish this work via a Special Service District. These actions include:

- Brief City Council on process and policy (September 14, 2010)
- Distribute the Policy Report
- Conduct a neighborhood briefing
- Obtain updated SSD letters of commitment
- Provide notice of a public hearing no sooner than ten days after the date the second notice appears in the newspaper
- Prepare an SSD Ordinance and obtain City Council adoption
- Obtain construction and right of way easements.
- Secure design and permitting services

**Alternatives:**

At least four alternatives to status quo have been considered in the past. The first was a proposed basin-wide waterfront SSD for the Lynnhaven. This lacked support as the funding stream led to a single dredging project timeline greater than 10 years at a City cost of \$3.5M per year. The next three were outlined to Council in early 2005, and included: 1) expanding the City main channel projects to include ‘spur’ channels to the neighborhoods; 2) assisting the neighborhood projects by providing project management and some cost sharing; and, 3) a fully funded City program that included cyclical maintenance of all feasible and warranted channels.

The second alternative was developed in the 2005 analysis after determining that the alternative to expand the City main channel projects alternative was overly large in scope and would have been difficult to manage. This alternative proposed that a network of channel extensions would be programmed and constructed – regardless of whether a neighborhood project existed to capitalize on the expenditure. The cost to the City of this alternative exceeded \$1M per year and was projected to last longer than 10 years.

The third alternative, also developed in 2005, focused on assisting neighborhood projects by providing project management and potential cost sharing, had some support and interest, but is a complex issue that needed a definite process. Lacking direction from Council, this alternative was never developed. It is a version of this 2005 alternative that this Policy Report in 2010 is attempting to define.

The fourth alternative was fully funding a City program to systematically dredge all waterways in need of maintenance would represent a very large commitment and significant change in policy and business areas. This alternative was introduced in both the 1997 and 2005 analysis. It was included to demonstrate the highest end of the potential alternatives. This alternative was also estimated to exceed \$35M (\$3.5M per year) and was deemed unaffordable.

This policy letter is setting the parameters for a hybrid alternative. It is based on individual neighborhood participation in partnering with the City to create individual dredging projects which are supported by three funding sources: City appropriation, neighborhood SSD and individual payment. Cost for each of the three types of channels (City spur, neighborhood, and

individual turning basins) is based on a sixteen year, three dredge cycle project. In the case of the ODCWA dredging project, the City is responsible for 20.6% of the \$1.38M combined cost.

The actual dredging construction cost will also include private channels and turn basins individually designed but, included in the combined City spur and neighborhood channel contract. This alternative provides our neighborhoods an opportunity to partner with the City to create economies of scale in accomplishing a quality engineering solution.

**Recommendation:**

This Policy Report recommends the hybrid alternative. While it includes an SSD as the funding source, it proposes using only a localized neighborhood - waterfront properties - SSD where the timeline to service is defined and acceptable. It includes City-funded spur channels to link the neighborhood funded channels to the main channel. It includes City management of the projects, and cost sharing to cover the contracting and administration, but only offers these services to communities that are willing to fund the projects through binding taxation. This ensures there will be a neighborhood benefit to the City's commitment. If adopted, this proposed program will lead to the affordable reclamation of navigation channels and improved Lynnhaven water quality.

It is in the City's interest to partner with the neighborhoods if we can technically, financially, and legally construct the cost sharing agreements to find positive solutions.

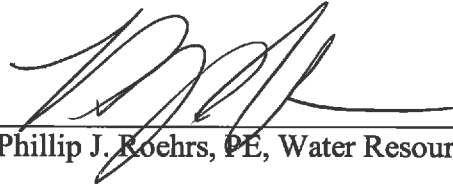
Though this is the resurrection of previous initiatives founded on City/Neighborhood cost participation, staff supports this serious attempt to tackle the continued deterioration of the Lynnhaven on two fronts. First it provides a huge relief to the increasing depreciation of the quality of our citizen's waterfront property and their access to navigable channels. Secondly it attacks the leading cause for the degradation of the Lynnhaven's water and habitat quality – siltation.

It is recommended that, if the Old Donation Creek neighborhood can enlist a supermajority of 80% of property owners support for the SSD, in this case 5 more owners (53 of 66 owners), then staff be authorized to prepare the SSD ordinance for City Council consideration to initiate a CIP neighborhood dredging project for Old Donation Creek. This project would be to implement a 3 cycle dredging project over the life of a 16 year SSD. The first dredging effort would reflect four major items of work: 1) Dredge City Spur Channel(s), 2) Dredge Neighborhood Channels, 3) Dredge Individual Channels and Turning Basins, and 4) Install Navigation Markers. Funding would come from three distinct sources: City CIP, Neighborhood SSD, and Individual Property Owners. It is understood that 24 months is required upon Council adoption of the SSD to conduct the engineering, surveying, permitting and contracting as well as allow the SSD fund balance to grow in advance of the first dredging.

**Policy Report: Neighborhood Dredging for Old Donation Creek**

**Prepared by:**

9/9/10

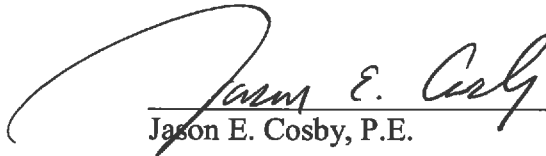


Date

Phillip J. Koehrs, PE, Water Resources Engineer

**Reviewed By:**

Public Works Director:



09 SEP 10

Jason E. Cosby, P.E.

Date

Management Services Director:



9 Sept 10

Catheryn R. Whitesell

Date

Finance Director:



9-9-10

Patricia A. Phillips

Date

City Attorney:



9/10/10

Mark D. Stiles

Date

Deputy City Manager:



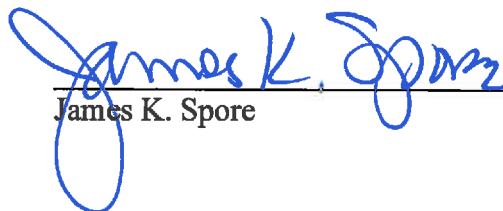
9.9.10

David L. Hansen

Date

**Approved by:**

City Manager:



9/10/10

James K. Spore

Date



**Attachment A**  
September 2010

Number	GPIN	Address	Assessment	Signed Willingness Letter
1	1478-73-1690-0000	4345 ALFRIENDS TRL	\$575,400.00	Y
2	1478-73-3625-0000	4341 ALFRIENDS TRL	\$656,700.00	Y
3	1478-73-4721-0000	4337 ALFRIENDS TRL	\$624,400.00	Y
4	1478-73-5747-0000	4333 ALFRIENDS TRL	\$669,000.00	Y
5	1478-73-6854-0000	4329 ALFRIENDS TRL	\$691,400.00	Y
6	1478-73-7970-0000	4325 ALFRIENDS TRL	\$1,058,300.00	Y
7	1478-73-8986-0000	4321 ALFRIENDS TRL	\$605,300.00	N
8	1478-84-0003-0000	4317 ALFRIENDS TRL	\$642,800.00	Y
9	1478-84-1100-0000	4313 ALFRIENDS TRL	\$607,900.00	Y
10	1478-84-2125-0000	4309 ALFRIENDS TRL	\$807,400.00	Y
11	1478-84-3280-0000	4305 ALFRIENDS TRL	\$856,400.00	Y
12	1478-84-4308-0000	4301 ALFRIENDS TRL	\$653,400.00	Y
13	1478-94-3370-0000	4053 TREE CHOP CIR	\$895,200.00	Y
14	1478-94-3143-0000	4049 TREE CHOP CIR	\$767,700.00	Y
15	1478-94-3040-0000		\$441,500.00	N
16	1478-93-4838-0000	4041 TREE CHOP CIR	\$1,283,500.00	Y
17	1478-93-5995-0000	4040 TREE CHOP CIR	\$846,000.00	Y
18	1478-94-6140-0000	4044 TREE CHOP CIR DUCKING	\$429,300.00	N
19	1478-94-8005-0000	1032 POINT TRL	\$820,500.00	Y
20	1478-93-8886-0000	4000 WHEELGATE LN	\$844,600.00	Y
21	1478-93-6781-0000	4016 WHEELGATE LN	\$1,551,200.00	N
22	1478-93-6581-0000	4024 WHEELGATE LN	\$1,118,700.00	N
23	1478-93-9349-0000	4025 WHEELGATE LN	\$1,366,700.00	Y
24	1478-73-3304-0000	812 ST LUKES ST	\$342,900.00	Y
25	1478-73-3297-0000	808 ST LUKES ST	\$446,400.00	Y
26	1478-73-4399-0000	4305 ST JAMES CT	\$489,200.00	Y
27	1478-73-5499-0000	4309 ST JAMES CT	\$479,300.00	Y
28	1478-73-7518-0000	4304 ST JAMES CT	\$516,800.00	Y
29	1478-73-8531-0000	841 ST JAMES DR	\$418,600.00	Y
30	1478-73-8692-0000	845 ST JAMES DR	\$493,700.00	N
31	1478-83-0609-0000	849 ST JAMES DR	\$545,100.00	Y
32	1478-83-1726-0000	857 ST JAMES DR	\$568,800.00	Y
33	1478-83-2822-0000	865 ST JAMES DR	\$538,800.00	Y
34	1478-83-3837-0000	869 ST JAMES DR	\$554,700.00	Y
35	1478-83-4950-0000	873 ST JAMES DR	\$520,200.00	Y
36	1478-83-5870-0000	4312 ST JAMES CIR	\$486,000.00	N
37	1478-83-6901-0000	4308 ST JAMES CIR	\$547,800.00	Y
38	1478-84-6053-0000	4304 ST JAMES CIR	\$586,000.00	Y
39	1478-83-8948-0000	4300 ST JAMES CIR	\$599,900.00	Y
40	1478-83-9814-0000	4301 ST JAMES CIR	\$587,400.00	N
41	1478-83-9648-0000	4305 ST JAMES CIR	\$585,200.00	N
42	1478-83-7636-0000	4309 ST JAMES CIR	\$566,500.00	N
43	1478-83-9502-0000	844 ST MARTIN DR	\$649,300.00	N
44	1478-83-8422-0000	840 ST MARTIN DR	\$532,800.00	Y
45	1478-83-9354-0000	836 ST MARTIN DR	\$578,500.00	N
46	1478-93-0260-0000	832 ST MARTIN DR	\$605,800.00	Y
47	1478-83-8169-0000	828 ST MARTIN DR	\$372,700.00	Y
48	1478-83-8016-0000	824 ST MARTIN DR	\$404,400.00	Y
49	1478-83-9031-0000	4304 ST MARTIN CT	\$580,500.00	Y
50	1478-92-0878-0000	4300 ST MARTIN CT	\$611,700.00	N
51	1478-92-0701-0000	4301 ST MARTIN CT	\$605,300.00	Y
52	1478-82-8713-0000	4305 ST MARTIN CT	\$488,000.00	Y
53	1478-82-8528-0000	816 ST MARTIN DR	\$650,100.00	Y
54	1478-82-5772-0000	812 ST MARTIN DR	\$337,900.00	N
55	1478-82-4634-0000	808 ST MARTIN DR	\$339,700.00	N
56	1478-82-3533-0000	800 ST MARTIN DR	\$313,000.00	N
57	1478-91-0979-0000	4105 CHESWICK LN	\$691,100.00	N
58	1478-92-1056-0000	4109 CHESWICK LN	\$837,800.00	Y
59	1478-92-2170-0000	4113 CHESWICK LN	\$992,900.00	Y
60	1478-92-3146-0000	4117 CHESWICK LN	\$836,100.00	Y
61	1478-92-3285-0000	4121 CHESWICK LN	\$782,900.00	Y
62	1478-92-4352-0000	4125 CHESWICK LN	\$968,600.00	Y
63	1478-92-5347-0000	4129 CHESWICK LN	\$819,400.00	Y
64	1478-92-5547-0000	4133 CHESWICK LN	\$955,800.00	Y
65	1478-92-6653-0000	4137 CHESWICK LN	\$1,021,800.00	Y
66	1478-92-8565-0000		\$0.00	N
<b>TOTAL ASSESSMENT</b>			<b>\$43,012,700.00</b>	

**ATTACHMENT C**  
**SUMMARY OF COSTS FOR COMMUNITY AND CITY CHANNEL DREDGING**

Special Services District based on 15.9 cents SSD rate

Community Channel Dredging	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16		
SSD Revenue	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390		
City Contribution**	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806	62,806		
Yearly Contribution	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196	131,196		
Cumulative Contribution	131,196	262,392	393,588	451,741	509,895	568,048	626,201	684,355	742,508	792,756	843,004	893,252	943,499	993,747	1,043,995	1,093,265		
Cumulative Contribution years 1 - 3 (1st Dredging)	393,588			Cumulative Contribution years 4 - 9 (2nd Dredging)													348,920	350,757

\*\* The City has to front the first 3 years, but the SSD can return funding to the General Fund beginning in year 4 (shown as negative number above)

City Channel Dredging	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16		
City Contribution	34,404	34,404	34,404	15,011	15,011	15,011	15,011	15,011	15,011	12,937	12,937	12,937	12,937	12,937	12,937	12,937		
Cumulative Contribution	34,404	68,808	103,212	118,223	133,233	148,244	163,255	178,265	193,276	206,213	219,149	232,086	245,023	257,960	270,896	283,833		
Cumulative Contribution years 1 - 3 (1st Dredging)	103,212			Cumulative Contribution years 4 - 9 (2nd Dredging)													90,064	90,557

Combined City Channel and Community Channel Dredging	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16		
SSD Revenue	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390	68,390		
City Contribution	97,210	97,210	97,210	4,774	4,774	4,774	4,774	4,774	4,774	4,774	4,774	4,774	4,774	4,774	4,774	4,774		
Total Combined Sources	165,600	165,600	165,600	73,164	73,164	73,164	73,164	73,164	73,164	73,164	73,164	73,164	73,164	73,164	73,164	73,164		
Cumulative Combined Sources	165,600	331,200	496,800	569,964	643,128	716,292	789,456	862,620	935,784	998,969	1,062,153	1,125,338	1,188,522	1,251,707	1,314,891	1,377,098		
Cumulative Combined Sources years 1 - 3 (1st Dredging)	496,800			Cumulative Combined Sources years 4 - 9 (2nd Dredging)													543,894	544,314

**ASSUMPTIONS:**  
 SSD Rate 15.9 cents  
 Total Assessments \$43,012,700  
 Assessment Increase 0.0%  
 Dredging Inflation 5.0%