



**TOWN OF SURFSIDE
SPECIAL PLANNING AND ZONING BOARD
AND
DESIGN REVIEW BOARD MEETING
AND
PLANNING AND ZONING BOARD**

Town Hall Commission Chambers
9293 Harding Ave., 2nd Floor
Surfside, Florida 33154

**AGENDA
MARCH 26, 2015**

SPECIAL PLANNING AND ZONING BOARD

**AGENDA
MARCH 26, 2015
6:00 PM**

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES: **FEBRUARY 18, 2015**
4. DISCUSSION ITEMS:
 - A. Corridor Analysis
5. ADJOURNMENT

DESIGN REVIEW BOARD

**AGENDA
MARCH 26, 2015
7:00 PM**

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES: **FEBRUARY 26, 2015**

4. DESIGN REVIEW BOARD APPLICATIONS:

A. Request of the Owner of Property located at 8718 Byron Avenue
The applicant is requesting to build a new single family residence.

B. Request of the Owner of Property located at 8726 Byron Avenue
The applicant is requesting to build a new single family residence.

C. Request of the Owner of Property located at 8859 Abbott Avenue
The applicant is requesting a carport conversion.

D. Request of the Owner of Property located at 908 Surfside Blvd
The applicant is requesting to convert a garage.

E. Request of the Owner of Property located at 9001 Dickens Avenue
The applicant is requesting to a fence in the front of the property.

F. Request of the Owner of Property located at 8819 Byron Avenue
The tenant is requesting to convert a garage.

G. Request of the Owner of Property located at 8917 Froude Avenue
The owner is requesting to build an addition.

5. ADJOURNMENT.

PLANNING AND ZONING BOARD

AGENDA
March 26, 2015
7:00 PM

1. CALL TO ORDER

2. ROLL CALL

3. APPROVAL OF MINUTES:

4. P&Z SITTING AS THE LOCAL PLANNING AGENCY:

AN ORDINANCE OF THE TOWN OF SURFSIDE, FLORIDA, AMENDING THE TOWN'S WATER SUPPLY FACILITIES WORK PLAN AND APPLICABLE ELEMENTS WITHIN THE TOWN'S COMPREHENSIVE PLAN RELATING TO WATER SUPPLY PLANNING; PROVIDING FOR INCLUSION IN THE TOWN OF SURFSIDE COMPREHENSIVE PLAN; PROVIDING FOR REPEAL OF CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

5. DISCUSSION ITEMS:

- A. Sheds**
- B. Practical Difficulty Variance**
- C. Interior Balcony**
- D. Future Agenda Items**
- E. Peter Glynn's Request-Proactive**

6. ADJOURNMENT.

THIS MEETING IS OPEN TO THE PUBLIC. IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT OF 1990, ALL PERSONS ARE DISABLED; WHO NEED SPECIAL ACCOMMODATIONS TO PARTICIPATE IN THIS MEETING BECAUSE OF THAT DISABILITY SHOULD CONTACT THE OFFICE OF THE TOWN CLERK AT 305-893-6511 EXT. 226 NO LATER THAN FOUR DAYS PRIOR TO SUCH PROCEEDING. HEARING IMPAIRED PERSONS MAY CONTACT THE TDD LINE AT 305-893-7936. IN ACCORDANCE WITH THE PROVISIONS OF SECTION 286.0105, FLORIDA STATUTES, ANYONE WISHING TO APPEAL ANY DECISION MADE BY THE TOWN OF SURFSIDE COMMISSION, WITH RESPECT TO ANY MATTER CONSIDERED AT THIS MEETING OR HEARING, WILL NEED A RECORD OF THE PROCEEDINGS AND FOR SUCH PURPOSE, MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE WHICH RECORD SHALL INCLUDE THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. AGENDA ITEMS MAY BE VIEWED AT THE OFFICE OF THE TOWN CLERK, TOWN OF SURFSIDE TOWN HALL, 9293 HARDING AVENUE. ANYONE WISHING TO OBTAIN A COPY OF ANY AGENDA ITEM SHOULD CONTACT THE TOWN CLERK AT 305-861-4863. TWO OR MORE MEMBERS OF TOWN COMMISSION OR OTHER TOWN BOARDS MAY ATTEND AND PARTICIPATE AT THIS MEETING. THESE MEETINGS MAY BE CONDUCTED BY MEANS OF OR IN CONJUNCTION WITH COMMUNICATIONS MEDIA TECHNOLOGY, SPECIFICALLY, A TELEPHONE CONFERENCE CALL. THE LOCATION 9293 HARDING AVENUE, SURFSIDE, FL 33154, WHICH IS OPEN TO THE PUBLIC, SHALL SERVE AS AN ACCESS POINT FOR SUCH COMMUNICATION.



**TOWN OF SURFSIDE
PLANNING AND ZONING BOARD
AND
DESIGN REVIEW BOARD MEETING**

Town Hall Commission Chambers
9293 Harding Ave., 2nd Floor
Surfside, Florida 33154

**FEBRUARY 26, 2015
7:00 PM**

MINUTES

DESIGN REVIEW BOARD

1. CALL TO ORDER

Chair Lindsay Lecour called the meeting to order at 7:01 pm.

2. ROLL CALL

Recording Clerk Frantza Duval called the roll with the following members present: Board Member Peter Glynn, Chair Lindsay Lecour, Vice Chair Jacob Kligman, Board Member Armando Castellanos, and Board Member Jorge Gutierrez. Board Member Moisha Rubenstein and Board Member Jessica Weiss were absent. Commissioner Cohen attended as liaison and arrived at 7:02 P.M.

3. APPROVAL OF MINUTES: **JANUARY 29, 2015**

Board Member Gutierrez made a motion to approve. The motion received a second from Board Member Castellanos and all voted in favor with Board Member Moisha Rubenstein and Board Member Jessica Weiss absent.

Board Member Jessica Weiss arrived at 7:06 p.m.

Board Member Moisha Rubenstein arrived at 7:21 p.m.

4. DESIGN REVIEW BOARD APPLICATIONS:

A. Request of the Owner of Property located at 8712 Byron Avenue

The applicant is requesting to build a new single family residence.

Town Planner Sarah Sinatra presented the item. James McKenzie architect answered questions from the Board. Board Member Gutierrez had questions regarding landscaping and tree preservation and location of pool equipment which seems to be very close to the next property. Mr. McKenzie responded and said they have a report from Dade County Code that the trees in question can be removed. Town Planner Sinatra said the pool equipment would be within code.

Board Member Gutierrez also would like to see more of a variation in the look between the houses being proposed next to each other. Board Member Weiss agreed as she said visually all three houses look the same. Board Member Glynn said if we have the right to say so he would like to see them redesigned. Board Member Castellanos said he sees a problem because if we approved these now somewhere down the line another builder will come in wanting to do the same.

The Board reviewed the code and plans of the homes in question. Mr. McKenzie elaborated on the facades of the three proposed houses. Vice Mayor Kligman said he really does not see any difference except for the color. Board Member Rubenstein agreed that the three homes are not unique from each other and all appear the same.

Board Member Gutierrez made a motion to approve 8712 Byron Avenue with the condition to screen the air conditioning. The motion received a second from Board Member Castellanos and all voted in favor.

B. Request of the Owner of Property located at 8718 Byron Avenue

The applicant is requesting to build a new single family residence.

Town Planner Sarah Sinatra presented the item and staff is recommending approval. James McKenzie architect tried to explain the difference between this house and 8712 Byron. Board Member Weiss disagrees and said a person who is not an architect cannot see a difference. Board Members gave some suggestions for redesign. The architect asked for a contingency on the issue and said he would change the design and come back to the Board.

Vice Mayor Kligman made a motion to defer 8718 Byron Avenue. The motion received a second from Board Member Gutierrez and all voted in favor.

C. Request of the Owner of Property located at 8726 Byron Avenue

The applicant is requesting to build a new single family residence.

Town Planner Sarah Sinatra presented the item and staff is recommending approval. Vice Chair Kligman sees enough of a difference in this plan but other Board Members did not agree. Board Member Glynn feels we need code to address this type of issue.

Board Member Castellanos made a motion to defer 8726 Byron Avenue. The motion received a second from Board Member Weiss. The motion carried 6/1 with Vice Chair Kligman in opposition.

D. Request of the Owner of Property located at 8811 Emerson Avenue

The applicant is requesting to build a new single family residence.

Town Planner Sarah Sinatra presented the item and staff is recommending approval. Board Member Glynn questioned how this style house fits in the neighborhood. He does not approve of it but feels it will pass as it meets our code. He strongly believes the code has to be revisited. Chair Lecour said they will add to a future agenda for discussion perceived styles/design. She also said she is not opposed to a flat roof.

Board Member Gutierrez made a motion to approve 8811 Byron Avenue. The motion received a second from Vice Chair Kligman. The motion carried 4/3 with Board Member Rubenstein, Board Member Glynn and Board Member Weiss in opposition.

E. Request of the Owner of Property located at 9455 Collins Avenue

The applicant is requesting to install a re-designed sign.

Town Planner Sarah Sinatra presented the item and staff is recommending approval with the condition that the sign setback is five feet from the property line.

Board Member Rubenstein made a motion to approve. The motion received a second from Board Member Gutierrez and all voted in favor

F. Request of the Tenant of Property located at 9460 Harding Avenue

The tenant is requesting to install a new sign.

Town Planner Sarah Sinatra presented the item and staff is recommending approval. A representative from the installing company asked if there were any questions. Mr. Shipman, the applicant wanted to know if the length of the sign could be increased. Ms. Sinatra addressed the question and said they would need a variance to do so.

Board Member Glynn made a motion to approve. The motion received a second from Vice Chair Kligman and all voted in favor.

G. Request of the Owner of Property located at 516 Surfside Blvd.

The owner is requesting to install a new gate.

Town Planner Sarah Sinatra presented the item and staff is recommending approval with the condition that the air conditioner unit be pushed back out of the 20 foot setback as per code. The architect Carlos Glen Brun spoke in favor of the item in more detail.

There was discussion regarding placing of hedges as well as fences and gates. Board Member Glynn is not in favor of six foot gates and would like to see that on a future agenda.

Board Member Rubenstein made a motion to approve with staff recommendation.

The motion received a second from Board Member Gutierrez and all voted in favor

5. ADJOURNMENT.

There being no further business to come before the Planning and Zoning Board the meeting adjourned at 8:11 p.m.

PLANNING AND ZONING BOARD
MINUTES
FEBRUARY 26, 2015
7:00 PM

1. CALL TO ORDER

Chair Lindsay Lecour called the meeting to order at 8:14 pm.

2. ROLL CALL

Recording Clerk Frantza Duval called the roll with the following members present: Board Member Peter Glynn, Chair Lindsay Lecour, Vice Chair Jacob Kligman, Board Member Armando Castellanos, and Board Member Moisha Rubenstein.

5. APPROVAL OF MINUTES: JANUARY 29, 2015

Board Member Castellanos made a motion to approve. The motion received a second from Board Member Glynn and all voted in favor

3. ORDINANCE:

A. Beach Sand Quality Ordinance –

AN ORDINANCE OF THE TOWN COMMISSION OF THE TOWN OF SURFSIDE, FLORIDA AMENDING ARTICLE I OF CHAPTER 34 “ENVIRONMENT” AND SPECIFICALLY CREATING SECTIONS 34-2 to 34-8 “BEACH SAND QUALITY” OF THE TOWN OF SURFSIDE CODE OF ORDINANCES; AMENDING CHAPTER 14 “BUILDING” OF THE TOWN OF SURFSIDE CODE OF ORDINANCES AND SPECIFICALLY AMENDING SECTION 14-28 “ISSUANCE OF BUILDING PERMITS”; AMENDING CHAPTER 90 “ZONING” AND SPECIFICALLY SECTION 90.5 “COMPLIANCE WITH REGULATIONS”; PROVIDING FOR INCLUSION IN THE CODE; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH; AND PROVIDING FOR AN EFFECTIVE DATE.

Recording Clerk Frantza Duval read the title of the ordinance.

Jane Graham, Assistant Town Attorney presented the item with suggested changes and named all the experts who gave reports, some of which were in attendance to answer any questions.

Vice Chair Kligman questioned the ordinance as DEP said excavated sand has to stay on the beach. Ms. Graham explained that municipalities can adopt stricter measures such as testing for toxics and in a way overrule DEP. There were some

questions from the Board as to what toxic testing will be required. Building Official Ross Prieto addressed some of the concerns the Board had.

Chair Lecour opened the meeting for public comment:

Public Speakers:

-Jeff Platt was Chair of Sand Committee and said there were three developers and two of them opted not to put sand on the beach but the Surf Club did and it was done in a terrible way. They failed to do as the mitigation plan called for and the sand placed on the beach was full of debris. He feels we should not allow any developer to put excavated sand on our beach. He said the DEP is in favor of taking away excavated sand as long as it is replaced.

-Tina Paul said other municipalities are looking at us as we accepted excavated sand which was a huge mistake and now we have the opportunity to do something about it for the future. She feels this ordinance is very important. She is against any excavated sand being placed on the beach as it cannot be cleaned properly.

-Michael Karukin speaking as a resident not as Commissioner. He was told by DEP that wet munsell #6 sand becomes a #7 when dry. He also questions what would happen if after all restrictions are put in place and sand does not meet our standards and DEP still is in opposition to our request. He also wants to know because of the proposed changes being made will this go back to the Commission as a first reading. Town Attorney Miller said it depends on what comes out of tonight's meeting and if it changes the purpose of the ordinance.

-Monica Grandeze spoke about the color of the sand and #5 being very dark when we had a beautiful pristine white sand beach. She also spoke about debris still on the beach and toxicology testing before and after it is placed on the beach.

-Marcos Arancibia asked to consider at least the #7 color sand and gave his reasons.

Board Member Glynn said he went to the Commission meeting and heard what the citizens said there and are saying now, that they do not want the sand. He asked if we could move ahead and poll the issue as people wanting to speak are repeating the same thing. He feels the ordinance does everything the people want. Vice Chair Kligman agrees with Board Member Glynn and said we do not want sand on the beach from excavation. Attorney Miller clarified that what they are voting on this evening does not say we do not want any excavated sand on the beach as the ordinance refers to toxicology testing. Stephen Blair from Miami Dade County spoke and said that excavated sand is utilized in many other municipalities. He spoke of resources that provide testing, beach renourishment as well as color of sand as #6 is acceptable.

-Bob de la Fuente representing Debbie Cimadevilla presented the Board with changes they are suggesting. He went through the proposed changes. Board Member Rubenstein said some of the changes were important to consider.

-Laurisa Alonso said it was important to have a safe beach free of debris. She also spoke of strict toxic testing and replaced sand should be like the pre existing sand.

-George Kousoulas spoke about sand color and showed the difference. He also spoke of particle size and presented the Board with his suggested changes to the ordinance. He clarified that when a developer applies for a permit from the CCCL the town is notified with a letter to object at which time the town can do so.

-Debbie Cimadevilla said they have been dealing with this issue a long time and the residents feel very strongly about it. She would like to see no excavated sand

on the beaches as she feels there is no way it can be free of debris and toxins. She totally supports what her attorney Mr. De la Fuentes said but would like to add that the sand placed on the beach should be lower than the control groups and named a sand mine that can custom your needs.

-Eli Tourgeman spoke as a resident and not Vice Mayor of Surfside. He is in favor of the suggested changes made this evening. He feels this ordinance is very important and the Board and Commission should be very proud for presenting it. He gave his suggestions for changes in some items.

Vice Chair Kligman said the town's independent person should select the location of where the sand is to be sampled and not the developer.

Chair Lecour said from what she has heard the request is to have no excavated sand put on their beach if it doesn't meet their proposed criteria. The Board further discussed the issue touching on sand color, cost of replacement, debris and responsibility. The wording of restrictive and more restrictive needed to be defined.

The Board then reviewed the proposed changes from the Commission and suggested additional changes to bring to the Commission. The Board had a little difference of opinion on the muncell number of sand. Testing of the sand before placing on beach as well as minimal testing the sand after it is placed on the beach. The conditions that George Kousolous proposed are also to be included as well as those from Mr. de la Fuentes.

Board Member Rubenstein made a motion to recommend back to the Commissioner their changes for a second reading. The motion received a second from Vice Chair Kligman and all voted in favor.

5. DISCUSSION ITEMS:

A. Sheds – Town Planner Sarah Sinatra presented the item.

A public speaker said she objected to the language regarding landscaping and questioned its meaning as well as who will be enforcing it. The Board explained the idea would be to have a shed screened with landscaping but agreed the language is vague. The Board agreed to clarify the language on this issue.

B. Practical Difficulty Variance – item deferred

C. Interior Balconies item deferred

D. Future Agenda Items

Six foot gates

Styles/design /perceived massing

Minimum landscaping code

6. ADJOURNMENT.

There being no further business to come before the Planning and Zoning Board the meeting adjourned at 10:48 p.m.

Accepted this ____ day of _____, 2015

Chair Lindsay Lecour

Attest:

Sandra Novoa, CMC
Town Clerk



**TOWN OF SURFSIDE
SPECIAL PLANNING AND ZONING BOARD MEETING**

Town Hall Commission Chambers
9293 Harding Ave., 2nd Floor
Surfside, Florida 33154

**FEBRUARY 18, 2015
6:30 PM**

MINUTES

1. CALL TO ORDER

Chair Lindsay Lecour called the meeting to order at 6:35 pm.

2. ROLL CALL

Recording Clerk Frantza Duval called the roll with the following members present: Board Member Peter Glynn, Chair Lindsay Lecour, Vice Chair Jacob Kligman and Board Member Armando Castellanos. Board Member Moisha Rubenstein was absent. Commissioner Cohen attended as liaison.

Chair Lecour invited Commissioner Michael Karukin to speak. Commissioner Karukin thanked the Board for keeping this process moving as more and more developers are inquiring about the town of Surfside especially the east/west side property aggregation. He asks the Board to also consider other elements such as the historic perseveration issues, Policies One and Three in the comprehensive plan, future land use, density and intensity. Chair Lecour thanked Mr. Karukin for bringing the matter up and for his leadership.

1. DISCUSSION ITEMS:

A. Corridor Analysis Presentation- Town Planner Sarah Sinatra thanked the Board for allowing this as a separate issue which will allow enough time to properly present the item. She explained that it was a two prong approach, first being the base line or existing conditions. This portion will be discussed this evening and then they will come back with a future plan, Mr. Gianni Feoli, Director of Landscape for CGA gave a detailed power point presentation. He touched on ownership of properties and designated historic preservation structures. He showed what the worst scenario could be and other options

that could be developed all for discussion purposes. He also reviewed the current zoning conditions, signalization, cross roads and pedestrian crosswalks.

The first component for discussion is with historic preservation as the society has designated one property but only the facade of the structure. The entire report has not yet come out and we do not know what the approach will be for the entire district. However, the buildings there do provide an historic sense to that street and Mr. Feoli believes we have some tools to encourage the historic preservation to help modulate the massing of the buildings. Also to consider redefining the depth of a frontage and include language in the code that any façade designated as historic be visible from the right of way. Also mentioned were breaks of buildings, and lighting. There were other redefinitions and language to this affect. All of these items for discussion will help reduce the massing.

After the presentation Mr. Feoli addressed questions from the Board and to get some direction.

Chair Lecour opened the meeting for public discussion.

-Michael Karukin would like more definition on the high probability items regarding aggregation, one being on 94/95th Street. He also said anytime we increase setbacks it is a good thing to consider and feels the item on the mid block crossing may be a bit of a challenge.

Commissioner Cohen left the meeting at 7:46 p.m.

Board Member Glynn said it was a very good presentation and this is a very important issue they are facing. If we allow the construction to continue in the same manner we will be living in a tunnel with building after building and we have to stop it or we will lose Surfside. The one thing he always loved about Surfside was the low buildings. He feels the Board has to stand up for what it believes and then let the lawyers battle it out. He said they should redefine the borders as they are today, rejoin these pieces and all have the same setbacks and cannot build bigger than they are today. There was much discussion regarding height of buildings and setbacks.

Chair Lecour would like to focus more on building lengths, setbacks, and breezeways.

Chair Lecour suggested 20 foot setbacks all around and come up with the footage of building lengths. She asked if single family homes would be allowed in this corridor and Mr. Feoli said they would be allowed but the market pressure would not want that. Retail and restaurants was also discussed for the district. Town Planner Sinatra gave further details and the procedures that would have to be taken by referendum for this.

Vice Chair Kligman said he has mixed feelings regarding breezeways and referred to Coral Gables. He said they can become just hallways, rather dark and can be dangerous. Mr. Feoli addressed the concern and said there has to be habitable use for these corridors and want should be discussed is how wide they should be. As development continues something to consider is breezeways be lined up with an existing one to provide continuity.

Board Member Glynn said, to be somewhat radical, he would like to define length and he would like to see 75 feet and a 17 foot wide breezeway. He likes the idea of large openings and not seeing large walls like the Marriott. With 17 foot breezeways we can define what type of lighting and or landscaping is required as to not have an alley appearance. Mr. Feoli suggested redefining Collins and Harding to achieve what they want. Board Member Glynn said they have to take bold measures now as Surfside is a place developers are after and standards have to be set before they lose control.

There was further discussion on length of buildings and Vice Chair Kligman suggested making too strict a code could result in no developers wanting to come in.

Public Speaker Jeff Platt said pool decks, such as the one in the Marriott, is just not a pool deck but there are structures on the roof such as a bar and a place to eat and understands now they are going to bring in music and entertainment. He believes this exceeds the 12 foot limit they were discussing.

Vice Chair Kligman suggested that on corner lots only one street be designated as having a 20 foot setback, with the smaller street giving less of a restriction. Mr. Feoli suggested putting in some language that if the property is on a corner than it have some prominence to it. He said we can define design restrictions.

Many different elements were discussed such as wall openings and historic preservation.

After much discussion Mr. Feoli recapped the Board's suggestions as follows:

-Board Member Glynn's scenario as follows: a minimum 20 foot street frontage all the way around; maximum building length of 75 feet; requirement for a 17 foot pedestrian corridor every 75 feet; a minimum of an interior side setback of 8.5 or 10 percent. The parapet on Collins side down to 48 inches or 4 feet and on Harding keep it at three feet. Also keeping the building articulation at 50 feet on all sides.

-Vice Chair Kligman's scenario as follows: a 20 foot street frontage for Harding and Collins and 10 feet East/West; maximum building length of 150 feet; a requirement for a 12 foot pedestrian corridor every 75 feet; minimum of an interior side setback of 6 feet or 10 percent. The parapet on Collins side down to 48 inches or 4 feet and on Harding keep it at three feet. Also keeping the building articulation as is.

Mr. Feoli will come back with a visual presentation of what the Board has discussed and the presentation will show what the massing would look like. To allow enough time for this presentation, the Board will meet an hour early (6:00 P.M.) on March 26, 2015 followed by the regular DRB/P&Z MEETING.

4. ADJOURNMENT.

There being no further business to come before the Planning and Zoning Board the meeting adjourned at 8:42 p.m.

Accepted this _____ day of _____, 2015

Chair Lindsay Lecour

Attest:

Sandra Novoa, CMC
Town Clerk



MEMORANDUM

To: Design Review Board
 Thru: Guillermo Olmedillo, Town Manager
 From: Sarah Sinatra Gould, AICP, Town Planner
 CC: Linda Miller, Town Attorney
 Date: March 26, 2015
 Re: 8718 Byron Avenue, New Residence

The property is located at 8718 Byron Avenue, within the H30A zoning. The applicant is proposing the construction of a two story new single-family residence with a pool. This application was deferred from the February 26, 2015 meeting due to the Board finding that the home did not meet Sec. 90-50 requirements to provide unique elevations from the surrounding properties.



Staff has reviewed the current application for consideration by the Design Review Board. In this report Staff presents the following:

- Applicable Zoning Code regulations, along with the results of the review
- Applicable Design Guidelines standards, along with the results of the review
- Staff Recommendation

STANDARDS / RESULTS

Town of Surfside Zoning Code, Applicable Requirements

Sec. 90.43 Maximum building heights

Height	Required Maximum	Proposed
H30A	30 feet	29 Feet

Sec. 90-45. Setbacks

H30A UPPER STORY FLOOR AREA IS LESS THAN 50% OF FIRST STORY FLOOR AREA	Required	Proposed (38%)
<i>Maximum Lot Coverage</i>	40%	38%
FIRST STORY		
Primary Frontage	Minimum 20 feet	20 feet
Interior side	Minimum 5 feet	5 feet
Rear	Minimum 20 feet	27 feet 6 inches
UPPER STORY		
Primary frontage	Minimum 20 feet/Average 22 feet	20 feet/ Average 25 feet
Interior side	Minimum 5 feet/Average n/a	9 feet
Rear	Minimum 20 feet/ Average n/a	27 feet 6 inches

Sec. 90.49 Lot standards

Lot Standards H30A	Required	Proposed
Minimum Lot width	50 feet	50 feet
Minimum lot area	8,000 feet	5,625 square feet *Existing Platted Lot.
Maximum lot coverage	40%	38%
Pervious area	35% (minimum)	36%

Sec. 90.50 Architecture and roof decks

	Required	Proposed
Unique Elevation	A unique elevation from the main buildings of the adjacent two (2) homes shall be created through the modulation of at least three (3) of the following architectural features: (a)Length, width and massing of the structure; (b)Number of stories; (c)Façade materials;	The articulation of the front facade is different and the number and location of doors and windows are different, as well as different colors for each house.

	(d) Porches and other similar articulation of the front façade; (e) Number and location of doors and windows; and (f) Roof style and pitch.	
Wall openings	10% for all elevations	Exceeds 10% for all elevations.
Roof Material	(a) Clay Tile; (b) White concrete tile; (c) Solid color cement tile which color is impregnated with the same color intensity throughout, provided said color if granted approval by the Design Review Board; (d) Architecturally embellished metal if granted approval by the Design Review Board; or (e) Other Florida Building Code approved roof material(s) if granted approval by the Design Review Board.	Flat roof proposed.

Sec. 90.61.1 Paving in front and rear yards in H30 and H40 Districts

Paving Yards	Required	Proposed
Front setback permeability	50% minimum	54%
Front yard landscaped	30% minimum	35%
Rear yard landscaped	20% minimum	56%
Number of Curb Cuts	One	One curb cut
Curb Cut side set back	5 feet minimum	5 feet
Curb cut width	18 feet width maximum	18 feet
Driveway Materials	Limited to the following 1. Pavers 2. Color and texture treated concrete, including stamped concrete 3. Painted concrete shall not be permitted. 4. Asphalt shall not be permitted.	Concrete slabs

Sec. 90-77 Off-street Parking Requirements

Required	Minimum Space Requirements	Proposed
Single-family	2 spaces	2 spaces

Sec. 90-89.4(6). Street Tree Requirements

Required	Required	Proposed

Street trees shall be required at one shade tree/palm tree per 20 linear feet of street frontage thereof along all public or private street right-of-ways in all zoning districts.	2 trees	4 trees
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Sec. 90-95. Single-family H30A and H30B district landscape requirements.

Required	Required	Proposed
A minimum of five trees of two different species and 25 shrubs shall be planted per lot. For all lots larger than 8,000 square feet in area, additional shrubs and trees shall be provided at the rate of one tree and ten shrubs per 2,000 square feet of lot area.	5 trees, 25 shrubs	5 and 25 shrubs provided.

Town of Surfside Adopted Residential Design Guidelines

Building Massing

Required	Proposed
Building forms should be varied enough to avoid monotony and to avoid pyramidal massing and should be compatible with surrounding houses.	Consistent

Main Entries

Required	Proposed
Prominent and oriented to the street	Main entry is prominent.
Rendered in appropriate scale for the block as well as the individual building	Appropriate for block.
Entry feature should not extend above the eave line of the structure	The entry feature does not extend above the eave line.
Should not be obstructed from view by fences, landscaping or other visual barriers	Main entry is not obstructed from view.

Decorative Features

Required	Proposed
Decorative features should be stylistically consistent throughout the entire building.	Consistent.

Overall Architectural Style

Required	Proposed
The overall style of each house should be consistent on all sides of the building, as well as among all portions of the roof.	Consistent.

Parking Driveways

Required	Proposed
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The width of paved driveways on private property as well as driveway cuts at the curb should be as narrow as possible	18 feet
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Driveway Treatments

Required	Proposed
Town encourages the use of pavers	Concrete blocks are provided.

Wall Materials and Finishes

Required	Proposed
The same material should be used on all building elevations unless multiple materials are a legitimate expression of the particular style.	The building will be stucco.

Roof Materials, Types, and Slopes

Required	Proposed
Roof types and slopes should be generally the same over all parts of a single building.	Consistent
Restricted materials for roofs are pre-determined in the Town's Building Code, which restricts roofing materials to: 1. Clay tile; 2. White concrete tile; 3. Solid color cement tile which color is impregnated with the same color intensity throughout, provided said color is first approved by the planning and zoning board; and 4. Metal.	Flat roof is proposed.

Windows and Trims

Required	Proposed
Window styles should always be consistent among all elevations of a building.	Consistent.
Frame materials should never vary on a single building.	No variation.
Window, door and eave trim should be consistent on all elevations of the house	Consistent.

RECOMMENDATION

Staff recommends approval.



MEMORANDUM

To: Design Review Board
Thru: Guillermo Olmedillo, Town Manager
From: Sarah Sinatra Gould, AICP, Town Planner
CC: Linda Miller, Town Attorney
Date: March 26, 2015
Re: 8726 Byron Avenue, New Residence

The property is located at 8726 Byron Avenue, within the H30A zoning. The applicant is proposing the construction of a two story new single-family residence with a pool. This application was deferred from the February 26, 2015 meeting due to the Board finding that the home did not meet Sec. 90-50 requirements to provide unique elevations from the surrounding properties.



Staff has reviewed the current application for consideration by the Design Review Board. In this report Staff presents the following:

- Applicable Zoning Code regulations, along with the results of the review
- Applicable Design Guidelines standards, along with the results of the review
- Staff Recommendation

STANDARDS / RESULTS

Town of Surfside Zoning Code, Applicable Requirements**Sec. 90.43 Maximum building heights**

Height	Required Maximum	Proposed
H30A	30 feet	29 Feet

Sec. 90-45. Setbacks

H30A UPPER STORY FLOOR AREA IS LESS THAN 50% OF FIRST STORY FLOOR AREA	Required	Proposed (41%)
Maximum Lot Coverage	40%	34%
FIRST STORY		
Primary Frontage	Minimum 20 feet	20 feet
Interior side	Minimum 5 feet	5 feet
Corner side	Minimum 10 feet	10 feet
Rear	Minimum 20 feet	27 feet 6 inches
UPPER STORY		
Primary frontage	Minimum 20 feet/Average 22 feet	20 feet/ Average 25 feet
Interior side	Minimum 5 feet/Average n/a	9 feet
Rear	Minimum 20 feet/ Average n/a	27 feet 6 inches

Sec. 90.49 Lot standards

Lot Standards H30A	Required	Proposed
Minimum Lot width	50 feet	50 feet
Minimum lot area	8,000 feet	5,625 square feet *Existing Platted Lot.
Maximum lot coverage	40%	34%
Pervious area	35% (minimum)	36%

Sec. 90.50 Architecture and roof decks

	Required	Proposed
Unique Elevation	A unique elevation from the main buildings of the adjacent two (2) homes shall be created through the modulation of at least three (3) of the following architectural features: (a)Length, width and massing of the structure; (b)Number of stories;	The articulation of the front facade is different and the number and location of doors and windows are different, as well as different colors for each house.

	(c) Façade materials; (d) Porches and other similar articulation of the front façade; (e) Number and location of doors and windows; and (f) Roof style and pitch.	
Wall openings	10% for all elevations	Exceeds 10% for each elevation.
Roof Material	(a) Clay Tile; (b) White concrete tile; (c) Solid color cement tile which color is impregnated with the same color intensity throughout, provided said color if granted approval by the Design Review Board; (d) Architecturally embellished metal if granted approval by the Design Review Board; or (e) Other Florida Building Code approved roof material(s) if granted approval by the Design Review Board.	Flat roof proposed.

Sec. 90.61.1 Paving in front and rear yards in H30 and H40 Districts

Paving Yards	Required	Proposed
Front setback permeability	50% minimum	54%
Front yard landscaped	30% minimum	35%
Rear yard landscaped	20% minimum	56%
Number of Curb Cuts	One	One curb cut
Curb Cut side set back	5 feet minimum	5 feet
Curb cut width	18 feet width maximum	16 feet
Driveway Materials	Limited to the following 1. Pavers 2. Color and texture treated concrete, including stamped concrete 3. Painted concrete shall not be permitted. 4. Asphalt shall not be permitted.	Concrete slabs

Sec. 90-77 Off-street Parking Requirements

Required	Minimum Space Requirements	Proposed
Single-family	2 spaces	2 spaces

Sec. 90-89.4(6). Street Tree Requirements

Required	Required	Proposed
Street trees shall be required at one shade tree/palm tree per 20 linear feet of street frontage thereof along all public or private street right-of-ways in all zoning districts.	7 trees	8 trees

Sec. 90-95. Single-family H30A and H30B district landscape requirements.

Required	Required	Proposed
A minimum of five trees of two different species and 25 shrubs shall be planted per lot. For all lots larger than 8,000 square feet in area, additional shrubs and trees shall be provided at the rate of one tree and ten shrubs per 2,000 square feet of lot area.	5 trees, 25 shrubs	5 and 25 shrubs provided.

Town of Surfside Adopted Residential Design Guidelines

Building Massing

Required	Proposed
Building forms should be varied enough to avoid monotony and to avoid pyramidal massing and should be compatible with surrounding houses.	Consistent

Main Entries

Required	Proposed
Prominent and oriented to the street	Main entry is prominent.
Rendered in appropriate scale for the block as well as the individual building	Appropriate for block.
Entry feature should not extend above the eave line of the structure	The entry feature does not extend above the eave line.
Should not be obstructed from view by fences, landscaping or other visual barriers	Main entry is not obstructed from view.

Decorative Features

Required	Proposed
Decorative features should be stylistically consistent throughout the entire building.	Consistent.

Overall Architectural Style

Required	Proposed
The overall style of each house should be consistent on all sides of the building, as well as among all portions of the roof.	Consistent.

Parking Driveways

Required	Proposed
The width of paved driveways on private property as well as driveway cuts at the curb should be as narrow as possible	18 feet

Driveway Treatments

Required	Proposed
Town encourages the use of pavers	Concrete blocks are provided.

Wall Materials and Finishes

Required	Proposed
The same material should be used on all building elevations unless multiple materials are a legitimate expression of the particular style.	The building will be stucco.

Roof Materials, Types, and Slopes

Required	Proposed
Roof types and slopes should be generally the same over all parts of a single building.	Consistent
Restricted materials for roofs are pre-determined in the Town's Building Code, which restricts roofing materials to: 1. Clay tile; 2. White concrete tile; 3. Solid color cement tile which color is impregnated with the same color intensity throughout, provided said color is first approved by the planning and zoning board; and 4. Metal.	Flat roof is proposed.

Windows and Trims

Required	Proposed
Window styles should always be consistent among all elevations of a building.	Consistent.
Frame materials should never vary on a single building.	No variation.
Window, door and eave trim should be consistent on all elevations of the house	Consistent.

RECOMMENDATION

Staff recommends approval.



MEMORANDUM

To: Design Review Board

Thru: Guillermo Olmedillo, Town Manager

From: Sarah Sinatra Gould, AICP, Town Planner

CC: Linda Miller, Town Attorney

Date: March 26, 2015

Re: 8859 Abbott Ave– Garage Conversion

The property is located at 8859 Abbott Ave, within the H30B zoning. The applicant is proposing to convert the garage to additional living space.



Staff has reviewed the current application for consideration by the Design Review Board. In this report Staff presents the following:

- Applicable Zoning Code regulations, along with the results of the review
- Applicable Design Guidelines standards, along with the results of the review
- Staff Recommendation

STANDARDS / RESULTS**Town of Surfside Zoning Code, Applicable Requirements*****Sec. 90-50.1 (5) Garage Facades***

Required	Proposed
1 window	1 window
Landscaping required along the base	Landscaping is provided along the base

Sec. 90-77 Off-street Parking Requirements

Required	Minimum Space Requirements	Proposed
Single-family	2 spaces	2 spaces proposed.

RECOMMENDATION

Staff is recommending approval.



MEMORANDUM

To: Design Review Board

Thru: Guillermo Olmedillo, Town Manager

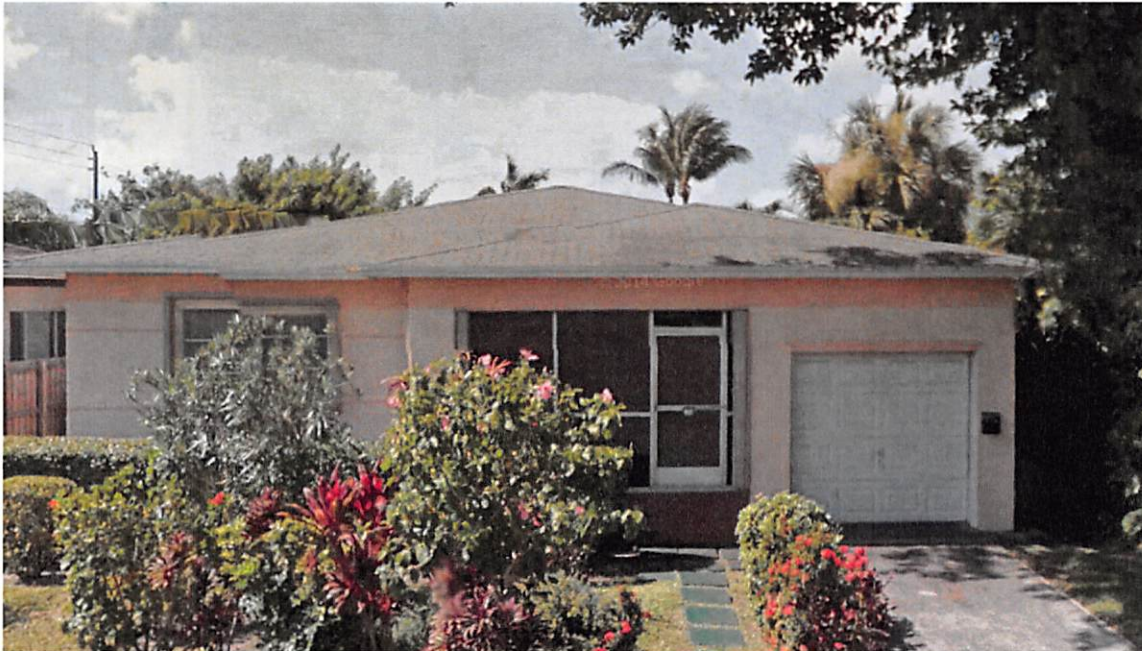
From: Sarah Sinatra Gould, AICP, Town Planner

CC: Linda Miller, Town Attorney

Date: March 26, 2015

Re: 908 Surfside Blvd– Garage Conversion

The property is located at 908 Surfside Blvd, within the H30B zoning. The applicant is proposing to convert the garage to additional living space. The home will be painted white with grey trim. A new two car driveway is proposed as well.



Staff has reviewed the current application for consideration by the Design Review Board. In this report Staff presents the following:

- Applicable Zoning Code regulations, along with the results of the review
- Applicable Design Guidelines standards, along with the results of the review
- Staff Recommendation

STANDARDS / RESULTS**Town of Surfside Zoning Code, Applicable Requirements*****Sec. 90-50.1 (5) Garage Facades***

Required	Proposed
1 window	1 window
Landscaping required along the base	Landscaping is provided along the base

Sec. 90-77 Off-street Parking Requirements

Required	Minimum Space Requirements	Proposed
Single-family	2 spaces	2 spaces proposed.

RECOMMENDATION

Staff is recommending approval.



MEMORANDUM

To: Design Review Board
Thru: Guillermo Olmedillo, Town Manager
From: Sarah Sinatra Gould, AICP, Town Planner
CC: Linda Miller, Town Attorney
Date: March 26, 2015
Re: 9001 Dickens Avenue

The property located at 9001 Dickens is within the H30B zoning district. The applicant is requesting to add a four foot high decorative wooden fence at their property facing Dickens Avenue. The request is only to place a fence along the side of the home, not to place the fence in front of the structure.



Staff has reviewed the current application for consideration by the Planning and Zoning Board. In this report Staff presents the following:

- Applicable Zoning Code regulations, along with the results of the review
- Staff Recommendation

STANDARDS / RESULTS

Town of Surfside Zoning Code, Applicable Requirements

Sec. 90.56 Fences, walls and hedges

	Required	Proposed
Wall with gate	Wall in the front are only permitted with the Planning and Zoning Board's approval.	Fence is proposed along the side of the property facing Dickens Avenue

Sec. 90-56.4 Front yard and corner yard fences and ornamental walls—Table.

Frontage	Maximum Height (Feet)	Maximum Opacity (Percent)	Proposed
Wider than 50 ft and less than 100 ft	4 ft + ½ ft per 10 feet of lot width exceeding 50 feet, maximum 6 ft	All wall and fence surfaces above two (2) feet measured from grade shall maintain a maximum opacity of fifty (50) percent	4 foot wood fence is proposed
Secondary frontage (Corner only)	Shall adhere to the height and opacity limitations for corresponding lot frontage		50% translucent.

Recommendation

Staff recommends approval.



MEMORANDUM

To: Design Review Board

Thru: Guillermo Olmedillo, Town Manager

From: Sarah Sinatra Gould, AICP, Town Planner

CC: Linda Miller, Town Attorney

Date: March 26, 2015

Re: 8819 Byron Ave– Garage Conversion

The property is located at 8819 Byron Ave, within the H30B zoning. The applicant is proposing to convert the garage to additional living space.



Staff has reviewed the current application for consideration by the Design Review Board. In this report Staff presents the following:

- Applicable Zoning Code regulations, along with the results of the review
- Applicable Design Guidelines standards, along with the results of the review
- Staff Recommendation

STANDARDS / RESULTS**Town of Surfside Zoning Code, Applicable Requirements*****Sec. 90-50.1 (5) Garage Facades***

Required	Proposed
1 window	1 window
Landscaping required along the base	Landscaping is required along the base and is a condition of approval.

Sec. 90-77 Off-street Parking Requirements

Required	Minimum Space Requirements	Proposed
Single-family	2 spaces	2 spaces proposed.

RECOMMENDATION

Staff is recommending approval with the condition that landscaping is provided along the base of the converted garage.



MEMORANDUM

To: Design Review Board
 Thru: Guillermo Olmedillo, Town Manager
 From: Sarah Sinatra Gould, AICP, Town Planner
 CC: Linda Miller, Town Attorney
 Date: March 26, 2015
 Re: 8917 Froude Avenue

The property is located at 8917 Froude Avenue, within the H30B zoning. The applicant is proposing the construction of one story addition to the front of the home.



Staff has reviewed the current application for consideration by the Design Review Board. In this report Staff presents the following:

- Applicable Zoning Code regulations, along with the results of the review
- Applicable Design Guidelines standards, along with the results of the review
- Staff Recommendation

STANDARDS / RESULTS

Town of Surfside Zoning Code, Applicable Requirements**Sec. 90.43 Maximum building heights**

Height	Required Maximum	Proposed
H30A	30 feet	21 Feet 5 inches

Sec. 90-45. Setbacks

H30A UPPER STORY FLOOR AREA IS LESS THAN 50% OF FIRST STORY FLOOR AREA	Required	Proposed Less than 50%
Maximum Lot Coverage	40%	35%
FIRST STORY		
Primary Frontage	Minimum 20 feet	20 feet
Interior side	Minimum 5 feet	5 feet
Rear	Minimum 20 feet	39 feet
FAÇADE ABOVE 15 FEET		
Primary frontage	Minimum 20 feet/Average 22 feet	20 feet **Must be modified to be an average of 22 feet, which will require a portion of the façade setback 24 feet from the property line.
Interior side	Minimum 5 feet/Average n/a	5 feet
Rear	Minimum 20 feet/ Average n/a	39 feet

Sec. 90.49 Lot standards

Lot Standards H30B	Required	Proposed
Minimum Lot width	50 feet	50 feet
Minimum lot area	5,600 square feet	5,625 square feet
Maximum lot coverage	40%	35%
Pervious area	35% (minimum)	46%

Sec. 90.50 Architecture and roof decks

	Required	Proposed
Wall openings	10% for all elevations	Exceeds 10% wall openings for each elevation.
Roof Material	(a) Clay Tile; (b) White concrete tile;	Tile proposed.

	<p>(c) Solid color cement tile which color is impregnated with the same color intensity throughout, provided said color if granted approval by the Design Review Board;</p> <p>(d) Architecturally embellished metal if granted approval by the Design Review Board; or</p> <p>(e) Other Florida Building Code approved roof material(s) if granted approval by the Design Review Board.</p>	
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Town of Surfside Adopted Residential Design Guidelines

Building Massing

Required	Proposed
Building forms should be varied enough to avoid monotony and to avoid pyramidal massing and should be compatible with surrounding houses.	Consistent

Main Entries

Required	Proposed
Prominent and oriented to the street	Main entry is prominent.
Rendered in appropriate scale for the block as well as the individual building	The block does not have structures over approximately 12 feet in height, therefore this home may not appear consistent with the block.
Entry feature should not extend above the eave line of the structure	The entry feature does not extend above the eave line.
Should not be obstructed from view by fences, landscaping or other visual barriers	Main entry is not obstructed from view.

Decorative Features

Required	Proposed
Decorative features should be stylistically consistent throughout the entire building.	The two story expression is not consistent with the one story existing structure.

Overall Architectural Style

Required	Proposed
The overall style of each house should be consistent on all sides of the building, as well as among all portions of the roof.	The windows do not appear to be consistent throughout the building.

Wall Materials and Finishes

Required	Proposed
The same material should be used on all building elevations unless multiple materials are a legitimate expression of the particular style.	The building will be stucco.

Roof Materials, Types, and Slopes

Required	Proposed
Roof types and slopes should be generally the same over all parts of a single building.	Consistent
Restricted materials for roofs are pre-determined in the Town's Building Code, which restricts roofing materials to: 1. Clay tile; 2. White concrete tile; 3. Solid color cement tile which color is impregnated with the same color intensity throughout, provided said color is first approved by the planning and zoning board; and 4. Metal.	Tile is proposed

Windows and Trims

Required	Proposed
Window styles should always be consistent among all elevations of a building.	The windows do not appear to be consistent.
Frame materials should never vary on a single building.	No variation.
Window, door and eave trim should be consistent on all elevations of the house	Consistent.

RECOMMENDATION

Staff has the following concerns with this application:

1. The code requires that an average setback be applied to structures over 15 feet in height. Therefore, any portion of the building over 15 feet in height must be modified to have an average setback of 22 feet (this will require a portion of the façade setback 24 feet from the property line).
2. The design guidelines state that structures should be appropriate for the block. The block does not have structures over approximately 12 feet in height; therefore this home may not appear consistent with the block.
3. The design guidelines state that decorative features should be stylistically consistent throughout the entire building. The two story expression is not consistent with the one story existing structure.
4. The design guidelines state that windows should be consistent. It appears that some of the windows are not being modified and these appear to be inconsistent with the proposed windows.



Town of Surfside Planning and Zoning Board Communication

Agenda Date: March 26, 2015
Subject: Water Supply Facilities Work Plan
From: Sarah Sinatra Gould, AICP, Town Planner

Background: In 2005 the Florida Legislature enacted significant changes to Florida Statute (F.S.) Chapter 163 – Intergovernmental Resources and Chapter 373 – Water Resources to address the State’s water supply needs. These changes required a stronger link between regional water supply plans prepared by water management districts and comprehensive plans prepared by local governments. In addition, improved coordination between local land use planning and local water supply planning was mandated.

Chapter 163 F.S. and Chapter 373 F.S. requires that the Town of Surfside identify how future water supply needs will be met through the preparation of a Water Supply Facilities Work Plan (Work Plan). The Work Plan must have a minimum planning horizon of 10 years and must be incorporated into the Town of Surfside Comprehensive Plan. The Work Plan must be completed within 18 months of the South Florida Water Management District (SFWMD) adopting or updating its own Lower East Coast (LEC) regional water supply plan.

The most recent update to the SFWMD regional LEC water supply plan was prepared in September 2013. As such, the Town must update its Water Supply Facilities Work Plan and any other corresponding chapters within its Comprehensive Plan by March 2015. The updates which are currently proposed by staff will serve to meet the requirements of the Florida Statutes.

Requested Action: Approval of an update to the Town’s Water Supply Facilities Work Plan and corresponding amendments to the Town’s Comprehensive Plan as it relates to potable water supply as required by Chapter 163 and Chapter 373 of Florida State Statutes. The Local Planning

Agency is required to review and make a recommendation on the proposed Work Plan to be forwarded to the Town Commission for final action.

Only the sections of each element of the Comprehensive Plan related to water supply are amended.

Staff Recommendation: Recommendation of approval by the Planning and Zoning Board to the Town Commission.

Exhibits:

- A. Revised Town of Surfside's Water Supply Facilities Work Plan
- B. Revised Comprehensive Plan Chapters

ORDINANCE NO. 15 - _____

AN ORDINANCE OF THE TOWN OF SURFSIDE, FLORIDA, AMENDING THE TOWN'S WATER SUPPLY FACILITIES WORK PLAN AND APPLICABLE ELEMENTS WITHIN THE TOWN'S COMPREHENSIVE PLAN RELATING TO WATER SUPPLY PLANNING; PROVIDING FOR INCLUSION IN THE TOWN OF SURFSIDE COMPREHENSIVE PLAN; PROVIDING FOR REPEAL OF CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 163.3167, Florida Statutes, requires each local government to address in its Comprehensive Plan, the water supply sources necessary to meet and achieve the existing and projected water use demand for an established planning period; and

WHEREAS, the Town of Surfside recognizes the need for integration between land use planning and water supply planning; and

WHEREAS, Section 163.3177, Florida Statutes, requires that local governments prepare and adopt at least a 10-Year Water Supply Facilities Work Plan and to update the Work Plan, at a minimum, every five years; and

WHEREAS, in order to reflect recent updates to state and regional Water Supply Facilities Work Plans, the Town desires to amend its Water Supply Facilities Work Plan and related elements within the Town's Comprehensive Plan; and

WHEREAS, pursuant to Section 90.17 of the Town Code, the Planning and Zoning Board is designated as the Local Planning Agency for the Town; and

WHEREAS, the Planning & Zoning Board in its capacity as the Local Planning Agency, has reviewed proposed amendments to the Future Land Use Element of the Comprehensive Plan as substantially contained herein and recommended approval to the Town Commission on March 26, 2015; and

WHEREAS, the Town Commission has reviewed the recommendation of the Planning and Zoning Board and, after duly noticed public hearings in accordance with the Florida Statutes and the Town Code, finds that this Ordinance is in the best interest and welfare of the residents of the Town.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COMMISSION OF THE TOWN OF SURFSIDE, FLORIDA:

Section 1. Recitals.

The foregoing “Whereas” clauses are hereby ratified and incorporated as the legislative intent of this Ordinance.

Section 2. Recommendation of Approval by the Local Planning Agency.

The Planning and Zoning Board, in its capacity as the Local Planning Agency, has reviewed the proposed amendments to the Town’s Comprehensive Plan and recommends approval by the Town Commission.

Section 3. Amendment of Water Supply Facilities Work Plan.

The Town Commission hereby adopts an amendment to its Water Supply Facilities Work Plan and also incorporates by reference its Water Supply Facilities Work Plan into its Comprehensive Plan as supporting data and analysis for the amendments adopted in this Ordinance. A copy of the Water Supply Facilities Work Plan is provided in “Exhibit A.”

Section 4. Amendment of the Town’s Comprehensive Plan.

The Town Comprehensive Plan is hereby amended as provided in Exhibit “B,” which is attached hereto and made a part of this Ordinance.

Section 5. Severability.

Should any section, paragraph, sentence, clause, phrase or other part of this Ordinance be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this Ordinance as a whole or any portion thereof, other than the part so declared to be invalid.

Section 6. Conflict.

That all Sections or parts of Sections of the Code of Ordinances, all Ordinances or parts of Ordinances, and all Resolutions, or parts of Resolutions, in conflict with this Ordinance are repealed to the extent of such conflict.

Section 7. Effective Date.

This Ordinance shall be effective thirty one days after the state Department of Economic Opportunity notifies the Town that the plan amendment package is complete, or if timely challenged, on the date a final order is issued by the Department of Economic Opportunity or Administration Commission finding the Plan Amendment in compliance in accordance with Section 163.3184, Florida Statutes.

PASSED and ADOPTED on First Reading the _____ day of _____, 2015.

PASSED and ADOPTED on Second Reading this _____ day of _____, 2015.

Daniel Dietch, Mayor

ATTEST:

Sandra Novoa, Town Clerk

**APPROVED AS TO FORM AND LEGALITY FOR THE USE
AND BENEFIT OF THE TOWN OF SURFSIDE ONLY:**



Linda Miller, Town Attorney

On Final Reading Moved by: _____

On Final Reading Seconded by: _____

VOTE ON ADOPTION:

Commissioner Barry R. Cohen	yes _____	no _____
Commissioner Michael Karukin	yes _____	no _____
Commissioner Marta Olchyk	yes _____	no _____
Vice Mayor Eli Tourgeman	yes _____	no _____
Mayor Daniel Dietch	yes _____	no _____



20- Year Water Supply
Facilities Work Plan

Prepared by



Calvin, Giordano & Associates, Inc.

EXCEPTIONAL SOLUTIONS™

1800 Eller Drive, Suite 600 · Fort Lauderdale, FL 33316

(phone) 954.921.7781 · (fax) 954.266.6487

Certificate of Authorization #514

~~November 26, 2008~~ June 2015

TABLE OF CONTENTS

Sections

1.0 INTRODUCTION

1.1 Statutory History

1.2 Statutory Requirements

2.0 BACKGROUND INFORMATION

2.1 Overview

2.2 Relevant Regional Issues

3.0 DATA ANALYSIS

3.1 ~~Population Information~~ Water Supply Providers

3.2 ~~Maps of Current and Future Areas Served~~ Hialeah-Preston Water Service Area and Facilities

3.3 Potable Water Level of Service Standard

3.4 ~~Population and Potable Water Demand Projections by Each Local Government Utility~~

~~3.5 Water Supply Provided by Other Entities~~

~~3.6 Conservation~~

~~3.7 Local Government Specific Actions, Programs, Regulations, Opportunities~~

~~3.8 Regional and Countywide Issues~~

~~3.9 Reuse~~

4.0 CAPITAL IMPROVEMENTS

4.1 Work Plan Projects

4.2 Capital Improvements/Schedule

5.0 GOALS, OBJECTIVES AND POLICIES

6.0 CONCLUSION

Appendix A – Miami Dade Water & Sewer Department Water Agreement

1.0 INTRODUCTION

The purpose of the Town of Surfside 20-Year Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources and facilities needed to serve existing and new development within the ~~local government's~~Town's jurisdiction. Chapter 163, Part II, F.S., requires local governments to prepare and adopt Work Plans into their Comprehensive Plans within 18 months after the water management district approves a regional water supply plan. The updated Lower East Coast Supply Plan was approved by the South Florida Water Management District (SFWMD) ~~on February 15, 2007~~in September 2013; therefore, the deadline for local governments within the Lower East Coast jurisdiction to amend their comprehensive plans, and adopt a Work Plan is ~~August 15, 2008~~March 2015.

Residents of the Town of Surfside purchase their water directly from Miami Dade Water and Sewer Department (WASD). Under this arrangement, the Town of Surfside Public Works Department coordinates with Miami Dade to ensure that adequate capacity is available for existing and future customers and that supporting infrastructure, such as the water lines, are adequately maintained.

The Town of Surfside Water Supply Facilities Work Plan will reference data from WASD's 20 year water supply plan (2014-2033), since the Town is a wholesale customer. The intent ~~of the County water supply plan is to meet the statutory requirements mentioned~~outlined in subsection 1.2 below, of this plan and to coordinate WASD's water supply initiatives with the 2013 Lower East Coast Water Supply Plan Update, prepared by the South Florida Water Management District.

According to Florida state guidelines Statutes, the Work Plan and ~~the any corresponding~~ comprehensive plan amendment must address the development of traditional and alternative water supplies, bulk sales agreements and conservation and reuse programs that are necessary to serve existing and new development for a minimum of a 10-Year planning period. This plan matches the WASD timeline of a plan-in-planning-length-of-20-years planning horizon.

The Town's Work Plan is divided into six sections:

1. Introduction
2. Background Information
3. Data Analysis
4. Capital Improvements
5. Goals, Objectives, and Policy Discussion
6. Conclusion

1.1 Statutory History

In 2002, 2004, and 2005 and 2011 the Florida Legislature enacted bills to address the State's water supply needs. These bills, especially Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapter 163 and 373 Florida Statutes (F.S.) by strengthening the statutory links between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by local governments. The bills require local governments to identify how future water supply needs will be met through preparation of a Water Supply Facilities Work Plan with a minimum planning horizon of 10 years. The Work Plan must also be incorporated into a state-approved local comprehensive plan. ~~In addition, these bills established the basis for improving coordination between the local land use planning and water supply planning.~~

1.2 Statutory Requirements

The following highlights the statutory requirements:

1. Coordinate appropriate aspects of ~~its—the~~ Town of Surfside's comprehensive plan with the ~~appropriate water management district's regional water supply plan~~ South Florida Water Management District (SFWMD) Lower East Coast Water Supply Plan (2013 LEC Plan). [163.3177(4) (a), F.S.]
2. Ensure that ~~its~~ the Town's future land use plan is based upon availability of adequate water supplies and public facilities and services. [s.163.3177 (6) (a), F.S., effective July 1, 2005.] Data and analysis demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Map amendments submitted to the Department of ~~Community Affairs~~ Economic Opportunity (DGAEO) for review. The submitted package must also include an amendment to the Capital Improvements Element, if necessary, to demonstrate that adequate public facilities will be available to serve the proposed Future Land Use Map modification.
3. Ensure that adequate water supplies and facilities are available to serve new development no later than the date on which the local government anticipates issuing a certificate of occupancy and consult with the applicable water supplier prior to approving building permit, to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy. [s.163.3180 (2) (a), F.S., effective July 1, 2005.] ~~This “water supply concurrency” is now in effect, and local governments should be complying with the requirement for all new development proposals. In addition, local governments should update their comprehensive plans and~~

~~land development regulations as soon as possible to address these statutory requirements. The latest point at which the comprehensive plan must be revised to reflect the concurrency requirements is at the time the local government adopts plan amendments to implement the recommendations of the Evaluation and Appraisal Report (EAR).~~

4. For local governments subject to a regional water supply plan, revise the General Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (the "Infrastructure Element"), within 18 months after the water management district approves an updated regional water supply plan, to:
 - a. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the updated regional water supply plan, pursuant to S. 373.709(2)(a), F.S., or alternative project(s) proposed by the local government under S. 373.709(8)(b), F.S.~~or the alternative project proposed by the local government under s. 373.0361(7), F.S. [s. 163.3177(6)(c), F.S.];~~
 - b. Identify the traditional and alternative water supply projects, bulk sales agreements, and the conservation and reuse programs necessary to meet current and future water use demands within the local government's jurisdiction [s. 163.3177(6)(c), F.S.]; and
 - c. Include a water supply facilities work plan for at least a 10-year planning period for constructing the public, private, and regional water supply facilities identified in the element as necessary to serve existing and new development. [s. 163.3177(6) (c), F.S.] Amendments to incorporate the water supply facilities work plan into the comprehensive plan are exempt from the twice-a-year amendment limitation. [s. 163.3177(6) (c), F.S.] The Work Plan must address the water supply sources necessary to meet and achieve the existing and projected water use demand for the region through the 2030 planning period as established by the 2013 LEC Plan [s. 163.3167(9), F.S.]
5. Revise the 5-Year Schedule of Capital Improvements to include any water supply, reuse, and conservation projects and programs to be implemented during the five-year period [s. 163.3177(3)(a)4, F.S.].
6. To the extent necessary to maintain internal consistency after making changes described in Paragraph 1 through 5 above, revise the Conservation Element to assess projected water needs and sources for at least a 10-year planning period, considering the 2013 LEC Plan~~appropriate regional water supply plan, the applicable District Water Management Plan, as well as applicable consumptive use permit(s)- [s.163.3177(6)(d)3, F.S.] [s.163.3177 (6) (d), F.S.]~~

~~If the established planning period of a comprehensive plan is greater than ten years, the plan must address the water supply sources necessary to meet and achieve the existing and projected water use demand for established planning period, considering the appropriate regional water supply plan. [s.163.3167 (13), F.S.]~~

7. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with applicable regional water supply plans and regional water supply authorities' plans. [s.163.3177 (6) (h) 1. F.S.]

~~8. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with applicable regional water supply plans and regional water supply authorities' plans. [s.163.3177 (6) (h) 1. F.S.]~~

98. Address in the EAR, the extent to which the local government has implemented the 10-year water supply facilities work plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, bulk sales agreements, and conservation and reuse programs are meeting local water use demands. [s.163.3191 (2) (1), F.S.] While an Evaluation and Appraisal Report is not required, local governments are encouraged to comprehensively evaluate, and as necessary, update comprehensive plans to reflect changes in local conditions. The evaluation could address the extent to which the local government has implemented the need to update their Work Plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, and conservation and reuse programs are meeting local water use demands [s.163.3191 (3), F.S.]

2.0 – BACKGROUND INFORMATION

2.1 Overview

The Town of Surfside is located between Miami Beach to the south and Bal Harbour to the north with the Atlantic Ocean to the east and the Village of Indian Creek and Bay Harbor Islands, separated by Indian Creek to the west. The Town of Surfside was incorporated on May 18, 1935 by 35 residents who signed the incorporation documents as members of the private Surf Club, which remains a significant landmark in Surfside.

The Town of Surfside is an evolving municipality consisting of approximately 329,5367.45 acres. Approximately 6758.33% is comprised of residential uses,

~~2.1.84% General Retail Services, 2.61.83% Community Facilities and 238% of all other uses as shown in Table 2.1 Existing Land Use. The largest increase seen from 1995 to 2007 has been an increase in Moderate Density Residential. Private recreation facilities and parking have been redeveloped into residential to provide additional housing.~~

Figure 2.1 illustrates the Town of Surfside existing land use and Figure 2.2 illustrates future land use.

Table 2.1
Existing Land Use
For Illustrative Purposes Only

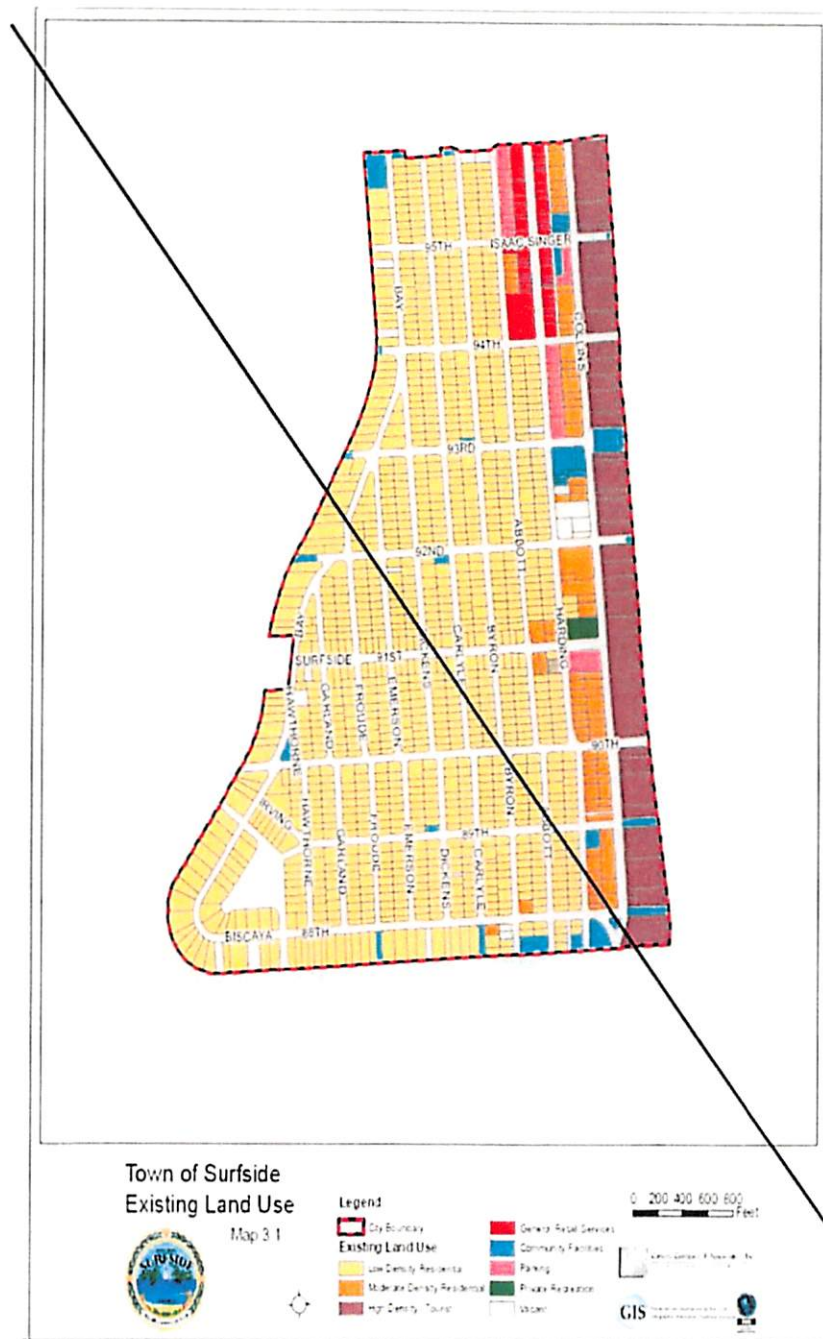
Existing Land Use	Land Area (ac)		
	1995	2007	% Change
Low-Density Residential	173.8	173.7	-0.06
Moderate-Density Residential	1.8	17.2	+855
High-Density Residential/Tourist	33.7	31.1	-8
General Retail Services	6.5	6.8	+23
Private Recreation	18.6	0.8	-2,226
Community Facilities	37.0 +/- 35	8.5 +/- 35	-335
Parking	40.0	4.5	-123
Vacant/Undeveloped	2.8	4.3	+55
ROW	81.6	82.5	+1
Total Town-Area (ac)	365	365	No Change

<u>EXISTING Land Use</u>	<u>Acres</u>	<u>% of Total Acres</u>
<u>Community Facilities</u>	<u>6.72</u>	<u>1.83%</u>
<u>General Retail Services</u>	<u>6.76</u>	<u>1.84%</u>
<u>Multi-Family Residential</u>	<u>39.10</u>	<u>10.64%</u>
<u>Parking</u>	<u>5.45</u>	<u>1.48%</u>
<u>Private Recreation</u>	<u>5.72</u>	<u>1.56%</u>
<u>Single Family Residential</u>	<u>175.25</u>	<u>47.69%</u>
<u>Vacant</u>	<u>7.07</u>	<u>1.93%</u>
<u>ROW</u>	<u>121.38</u>	<u>33.03%</u>
TOTAL ACREAGE	367.45	100.00%

~~Source: Town of Surfside 1999-2010 Comprehensive Plan; 1995-EAR GIS calculations prepared by the Town of Surfside; Calvin, Giordano & Associates, 2007.~~

The largest increase from 1995 to 2007 has been in Moderate Density Residential land use. Private recreation facilities and parking have been redeveloped into residential use to provide additional housing. **Figure 2.1** illustrates the Town of Surfside existing land use and **Figure 2.2** illustrates future land use.

Figure 2.1





Source: Town of Surfside 2010 Comprehensive Plan

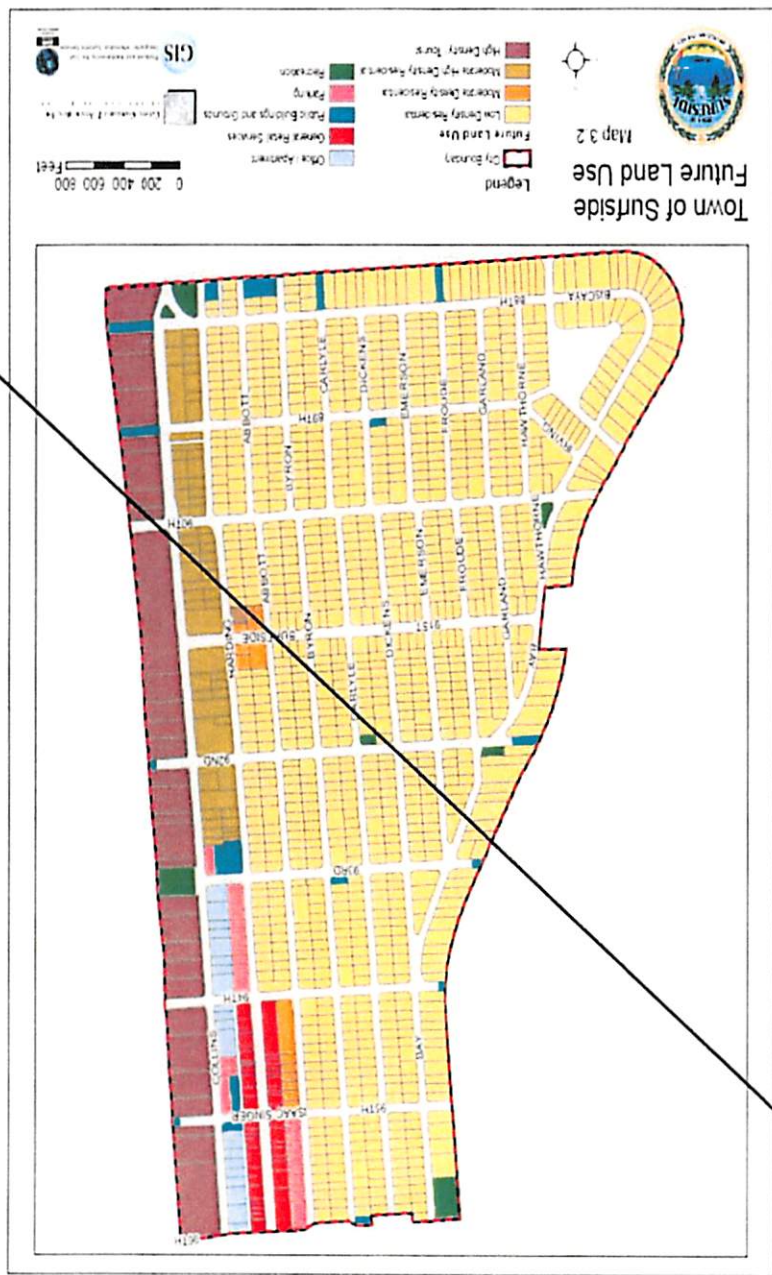
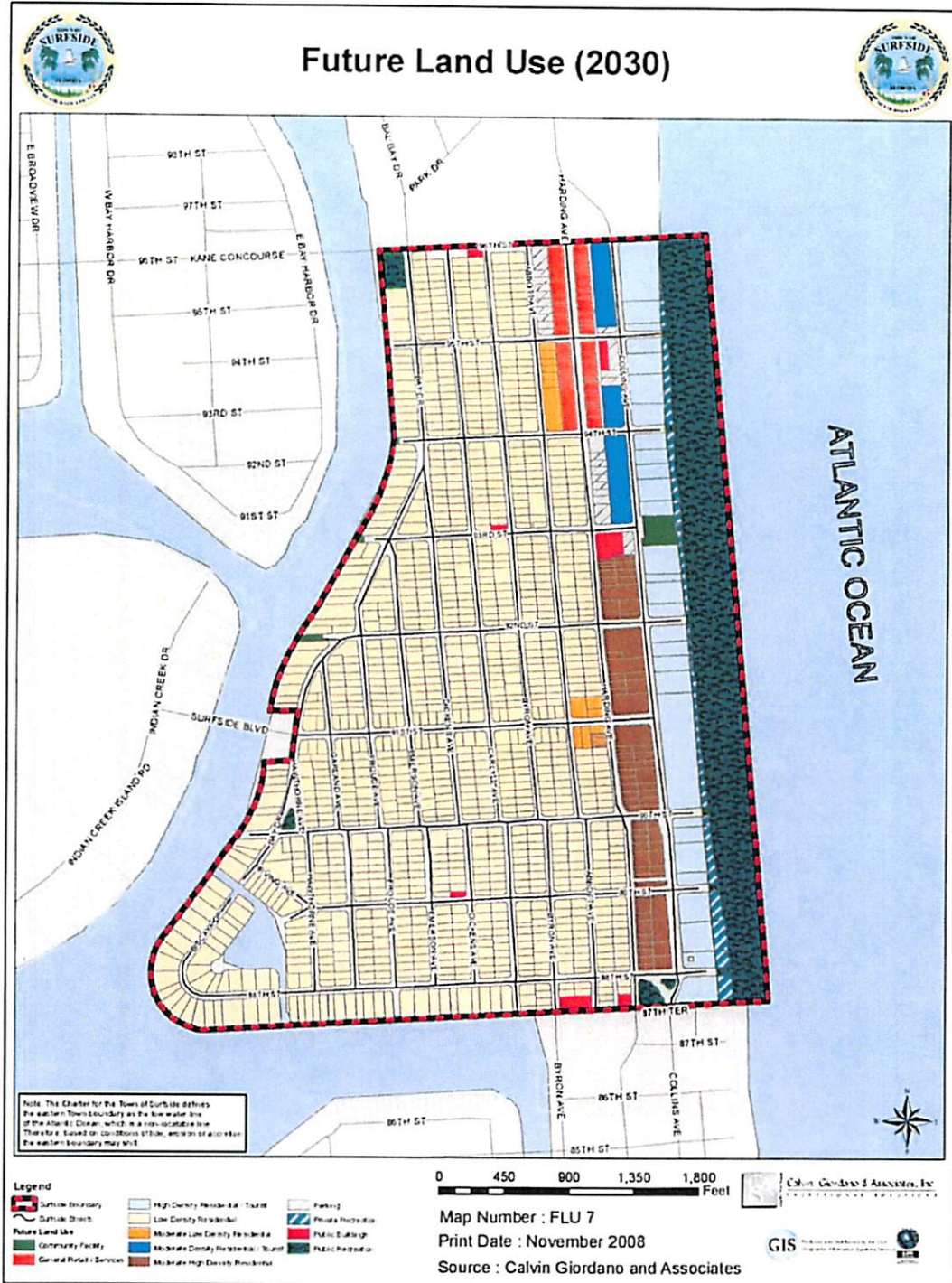


Figure 2.2



Source: Town of Surfside 2010 Comprehensive Plan

2.2 Relevant Regional Issues

~~As the state agency responsible for water supply in the Lower East Coast planning area, the South Florida Water Management District (SFWMD) plays a pivotal role in resource protection, through criteria used for Consumptive Use Permitting. As pressure increased on the Everglades ecosystem resource, the Governing Board initiated rule making to limit increased allocations dependent on the Everglades system. As a result, the Regional Water Availability Rule was adopted by the Governing Board on February 15, 2007 as part of the SFWMD's Consumptive Use Permit Program. This reduced reliance on the regional system for future water supply needs, mandates the development of alternative water supplies, and increasing conservation and reuse.~~

As the state agency responsible for water supply planning within the Lower East Coast region, the South Florida Water Management District (SFWMD) plays a pivotal role in ensuring an adequate supply of water to protect, enhance and restore natural systems; meet population demands; and address all other existing and projected needs for water supply. The SFWMD 2013 LEC Plan identified several current issues of importance to the region's water supply including:

1. The need to reduce reliance on the regional system for future water supply needs by developing alternative water supplies.
2. The need for increased conservation, reclamation and re-use methods in order to reduce per capita use and delay or avoid adding capacity.
3. The need to better integrate energy and water management.
4. The need to consider climate change and its hydrogeological effects such as sea level rise and salt water intrusion in water supply planning.
5. The need to limit withdrawals from both the Surficial Aquifer System and surface water from Lake Okeechobee.
6. The need to relieve pressure on the Everglades ecosystem by seeking alternative water supply sources that are not dependent upon the Everglades for recharge as per the 2007 Regional Water Availability Rule.
7. The need to reduce nutrient loadings to the environment by eliminating the use of six ocean outfalls in southeastern Florida as the primary means of disposal for treated domestic wastewater by December 20, 2025 as per the 2008 Leah G. Schad Ocean Outfall Program.

The Town of Surfside 20-Year Water Supply Facilities Work Plan aids in addressing regional challenges by providing data and analysis to SFWMD, and by collaborating with other local municipalities and the Miami Dade Water and Sewer Department (WASD) to strengthen the water supply planning process. The Town fully supports regulatory changes, water conservation programs and alternative water supply projects under the purview of SFWMD and the WASD, inclusive of actions which help to address climate change such as salt water intrusion monitoring, groundwater modeling and infrastructure assessments.

The Town works closely with the WASD to achieve targeted goals as outlined in the "Miami Dade Water and Sewer Department 20-year Water Use Efficiency Goal Based Plan" approved by SFWMD in May 2007. Included in the water use efficiency plan are the Water Conservation Best Management Practices (BMP) along with a countywide BMP implementation schedule, costs and water savings projections. Water conservation within the WASD service area is in accordance with SFWMD Water Use Permit No. Re-Issue 13-00017-W, Limiting Condition Nos. 45 and 49 and Exhibit 27.

The Town has already implemented several of its own water saving policies and procedures as identified below, and will continue to support and expand existing goals, objectives and policies in the comprehensive plan that promote water conservation in a cost-effective and environmentally sensitive manner.

- In an attempt to reduce overall water consumption, Surfside adopted a tiered structure water billing plan. This unit rate billing discourages high consumption users by charging a higher unit rate each time a tier of consumption is reached.
- Surfside installed automated water meters Town-wide. These meters monitor daily consumption and alert Public Works staff via email and text message of any water leaks 24 hours per day 7 days per week. This automated response reduces the duration of an active water leak or line break, thus reducing overall water consumption and waste.
- Established policies within the Comprehensive Plan to improvements to improve the Town's Code of Ordinances by incorporating water conservation based irrigation requirements, native species list, lawn watering restrictions, use of ultra-low volume water saving devices for substantial rehabilitation and new construction.
- Adopted a policy to promote education programs for residential, commercial and other uses that encourages conservation of potable water and discourages waste.

3.0 – DATA ANALYSIS

3.1 Water Supply Providers

The Town of Surfside is one of fifteen a-wholesale customers who and purchases its/their finished water directly from the Miami Dade Water and Sewer Department (WASD)- under 20-year water use agreements.

The WASD's service area is the entire/all of Miami-Dade County within the Urban Development Boundary (UDB), excluding portions of North Miami, North Miami Beach, Homestead and Florida City which have their own water supply facilities.

~~The areas within the Urban Expansion are included in the planning horizon after 2015.~~

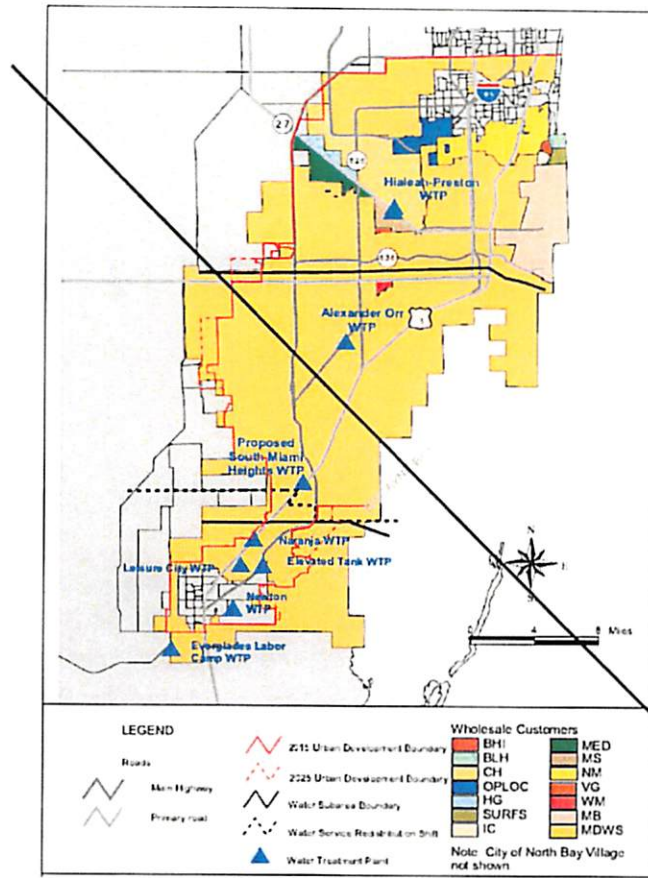
The 20-Year Water Use Permit (WUP) for the Miami Dade WASD was approved by the SFWMD Governing Board on November 15, 2007. Subsequent modifications were issued, with the latest one dated July 16, 2012. The water use permit limits the annual allocation to 149,906 million gallons (MG) and the maximum monthly allocation to 13,117 million gallons until the permit expires on December 31, 2030. These allocations are further limited by the wellfield operational plan described in Limiting Condition 27 of the water use permit. On June 20, 2014 WASD submitted an application for modification and extension of the existing WUP. Said modification includes new water demand projections based on 2010 population data and revised alternative water supply and reuse projects.

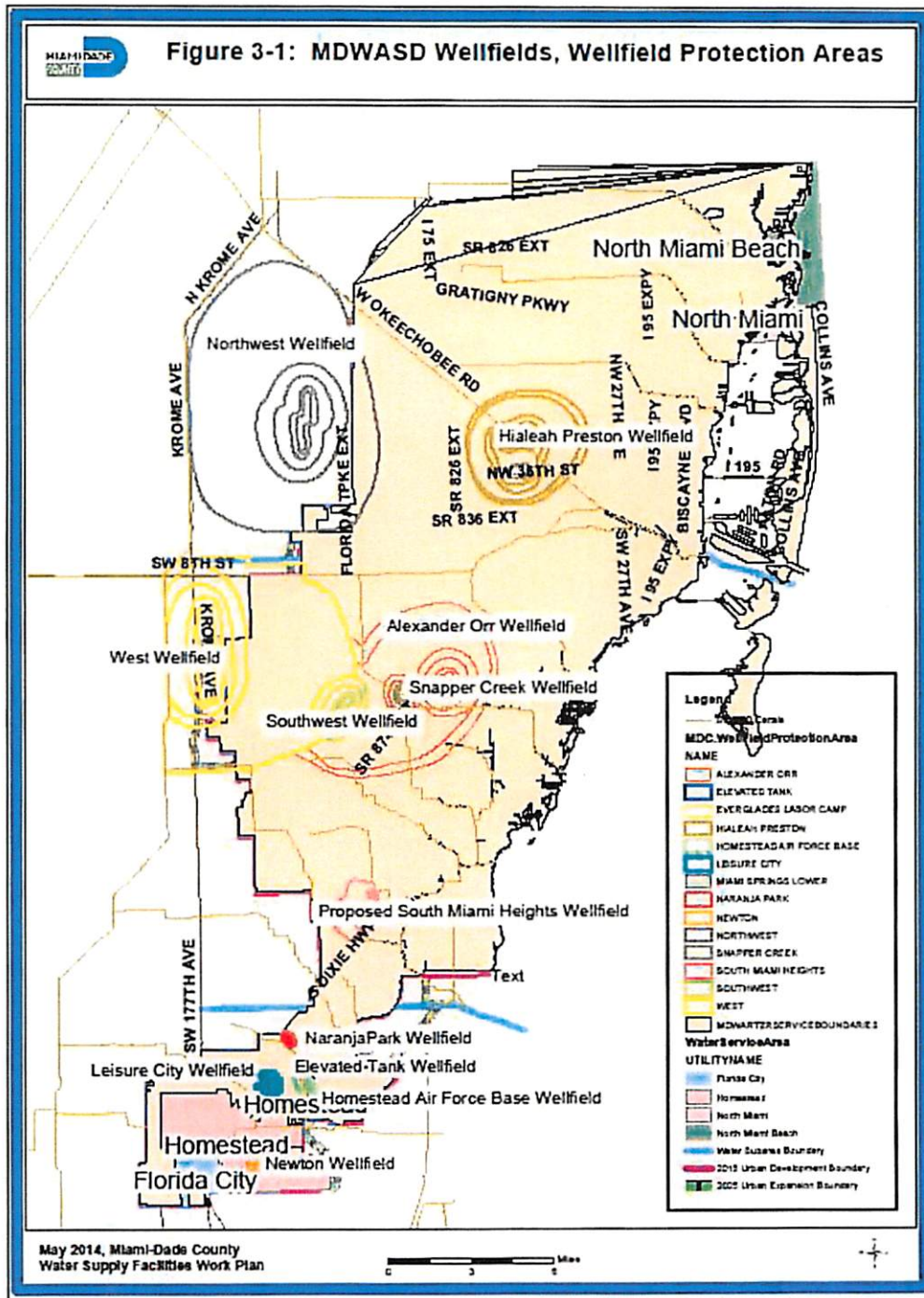
The supply capacity and treatment capacity of WASD service area are 724.44 MGD and 517.19 MGD respectively. As will be shown in more detail in the "Data Analysis" section, the WASD water supply and treatment systems have sufficient installed capacity to produce more potable water than is currently required within its service area to meet current demands and future projections.

3.2 Map of Areas Served Hialeah Preston Water Service Area and Facilities

The Town of Surfside is a wholesale customer and receives water in from the Miami-Dade Water and Sewer Department's Hialeah-Preston service area. The Hialeah-Preston Water Treatment Plants (WTPs) and their associated wellfields and finished water lines are service area and its associated is illustrated in Figure 3.1 and Figure 3.2 respectively.

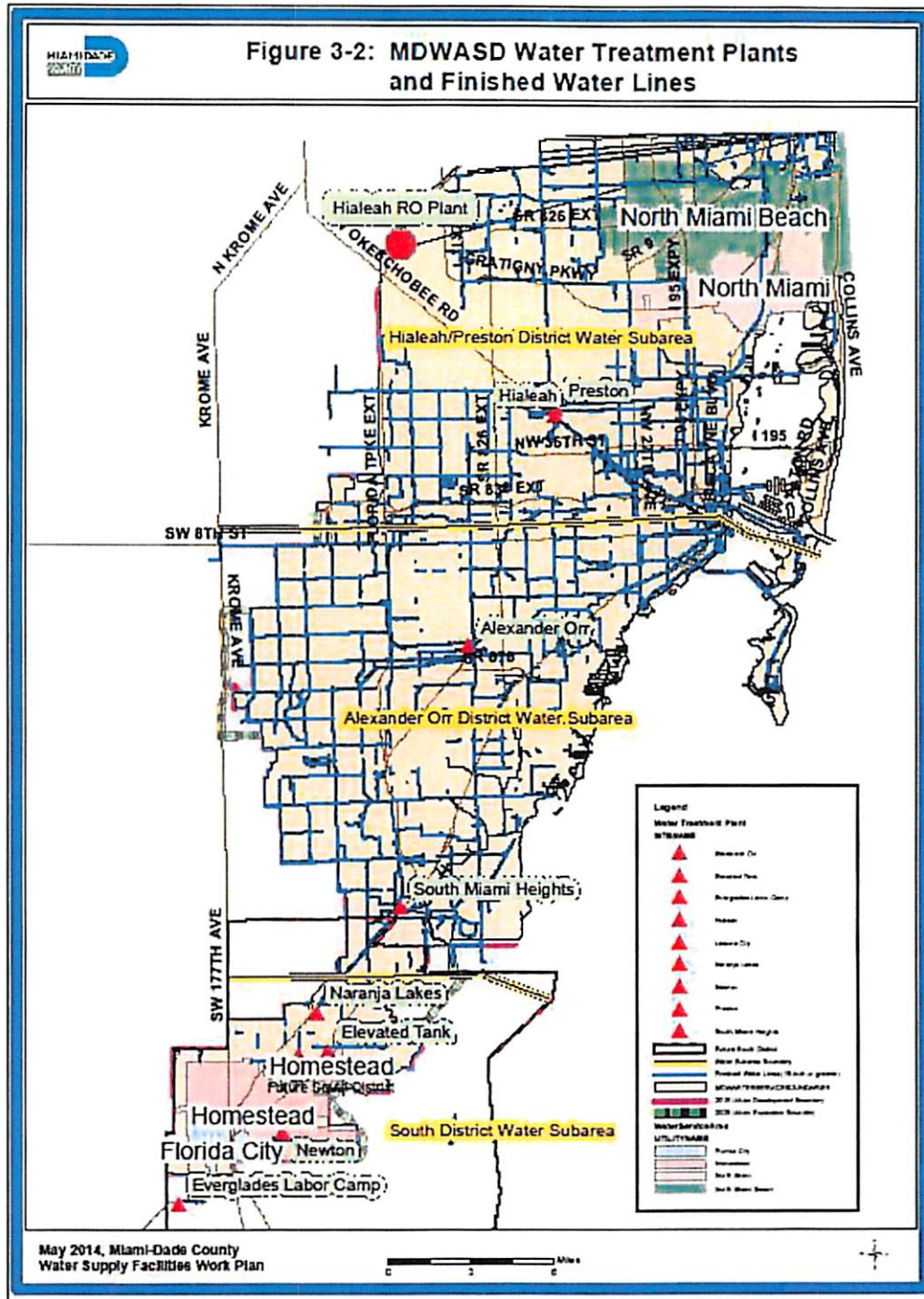
Figure 3.1





Source: Miami-Dade County 2008 Water Supply Facilities Work Plan.
Source: WASD's 20 year water supply plan (2014-2033)

Figure 3.2



Source: WASD's 20 year water supply plan (2014-2033)

Hialeah Water Treatment Plant (WTP)

The Hialeah WTP was originally designed in 1924 with a total capacity of 10 mgd. By 1935, the plant's capacity totaled 40 mgd. In 1946, capacity was increased to 60 mgd. Air strippers with a capacity of 84 mgd were added to the treatment process in 1991 to remove volatile organics from the finished water. A 3.2 MG storage reservoir for both the Hialeah and John E. Preston WTPs was also added in 1991. The Hialeah WTP has a current rated capacity of 60 mgd and there are plans to rerate and upgrade the Hialeah WTP to a capacity of 70 mgd, if necessary. The treatment process for this WTP includes lime softening with sodium silicate activated by chlorine, recarbonation, chlorination, ammoniation, fluoridation, filtration, and air stripping. The plant site is relatively small, and is surrounded by residential areas.

Hialeah WTP Wellfields

The source water for the Hialeah WTP is from the Hialeah-Miami Springs Wellfields, supplemented by the Northwest Wellfield. There are three active wells located in the Hialeah Wellfield constructed in 1936. Each well is 14 inches in diameter, 115 feet deep and have casing depths of 80 feet. The total wellfield capacity is 12.54 mgd or 8,700 gpm (2,900 gpm for each well). The twenty active wells located in the Miami Springs Wellfield were constructed between 1924 and 1954. These wells are 14 inches and 30 inches in diameter, 80 to 90 feet deep and have casing depths of 80 feet. The total wellfield capacity is 79.30 mgd or 55,070 gpm (ranging between or 2,500 and 5,000 gpm for each well). The Northwest Wellfield has fifteen active wells that were constructed in 1980. The wells are 40 inches and 48 inches diameter and 80 to 100 feet deep, with casing depths ranging from 46 to 57 feet. These wells have two-speed motors. The total nominal capacity of the wells at the low speed flow rate is 149.35 mgd. The capacity of each well, except well No. 10, is 10 mgd at the low speed flow rate. Well 10 have a low speed capacity of 9.35 mgd. The total nominal capacity for the wells at the high speed flow is 220.94 mgd.

John E. Preston Water Treatment Plant (WTP)

The John E. Preston WTP was originally designed as a 60 mgd plant in 1968 and upgraded to 110 mgd in 1980. The plant was re-rated to a total capacity of 130 mgd in 1984. The plant reached its present capacity of 165 mgd with another addition in 1988. In 1991, the plant was modified with an air stripping capacity of 185 mgd to remove VOCs. In 2005, plant process modifications to provide enhanced softening for reduction of color and total organic carbon came on line. The main source of water for the Preston WTP is from the Northwest Wellfield. The current rated capacity is 165 mgd with a treatment process similar to that of the Hialeah WTP. This includes lime softening with ferric and other coagulant

and chemicals added prior to lime for enhanced softening, recarbonation, chlorination, ammoniation, fluoridation, filtration, and air stripping. The Preston plant is also located in a residential area of Hialeah.

John E. Preston WTP Wellfields

The seven active wells located in the John E. Preston Wellfield were constructed in 1966 and 1972. Each well is 42 inches in diameter, 107 feet deep and have casing depths of 66. The capacity of wells No. 1 through No. 6 is 5,000 gallons per minute (gpm) each and the capacity of well No. 7 is 7,000 gpm. The total wellfield capacity is 53.28 mgd.

Hialeah-Preston Water Distribution Facilities

Finished water from the Hialeah and John E. Preston WTPs is pumped through a system of dedicated low-pressure pipelines to remote storage tanks and pumping facilities. This system provides water service to the southeastern part of the Hialeah Preston subarea. The low pressure system starts at the Hialeah WTP with a 42-inch diameter main heading due east along N.W. 62nd Street, and 36-inch and 42-inch diameter mains running southeast along Okeechobee Road then parallel to the Miami River. The main on N.W. 62nd Street connects to the N.W. 67th Street pumping station, which pumps the water to the south through a 30-inch diameter main running along N.W. 10th Ave. The 30-inch diameter main continues south and connects into the N.W. 36th Street pumping station. This main continues further south and connects into the golf ground pump station.

The 36-inch and 42-inch diameter mains combine into a 54-inch diameter main at N.W. 42nd Avenue. They split again into a 36-inch and a 42-inch diameter main at N.W. 32nd Avenue. These mains connect to the 30th Avenue pump station. The 30th Avenue pump station feeds two 36-inch diameter mains that connect to the 20th Street pumping station to complete the loop. The pipe loop is made predominantly of concrete and cast iron pipes that were installed in the early 1930s. Some segments of this loop having been in service for more than 60 years. Replacement of these pipes are scheduled in the MDWASD maintenance program.

The remaining part of this subarea is served by a high pressure system. Water is pumped into the system by five high service in-plant pumps with a total capacity of 34.1 mgd at 167 feet total dynamic head (TDH). The high pressure system delivers water service to Hialeah, Miami Springs, and a high pressure main connected to the City of Miami. The northern section of the subarea is supplied by one major piping loop. The loop begins at the plant with a 72-inch diameter main heading north along West 2nd Avenue, next it turns west at West 20th Street, and then it turns North along West 4th Avenue to NW 191st Street. At this location, it turns east until it reaches N.E. 18th Avenue. It then turns south and connects into a 54-inch diameter main that connects to the N.W. 67th Street pumping station.

The southwestern portion of the subarea is supplied by a 36-inch diameter main that connects to the 54-inch diameter main heading out of the John E. Preston WTP at West 25th Street. The main heads west on N.W. 74th Street then turns south on N.W. 107th Avenue. It eventually interconnects with the Alexander Orr, Jr. subarea piping network on S.W. 56th Street around S.W. 117th Avenue.

Hialeah-Preston Finished Water Storage Facilities

The finished water storage facilities for the Hialeah-Preston subarea consist of both "in-plant" and remote storage facilities. The storage facilities are summarized below in Table 3.1.

Table 3.1
Hialeah-Preston Finished Water Storage Facilities

<u>Location</u>	<u>Description</u>	<u>Capacity (MG)</u>
<u>Hialeah WTP</u>	<u>Reservoir – Ground Storage</u>	<u>3.0</u>
<u>Hialeah WTP</u>	<u>Clearwell</u>	<u>1.7</u>
<u>John E. Preston WTP</u>	<u>Ground Storage Tank No. 1</u>	<u>9.0</u>
<u>John E. Preston WTP</u>	<u>Ground Storage Tank No. 2</u>	<u>14.0</u>
<u>John E. Preston WTP</u>	<u>Clearwell</u>	<u>1.1</u>
<u>N.W. 20th Street</u>	<u>Ground Storage Tank</u>	<u>7.5</u>
<u>N.W. 36th Street</u>	<u>Ground Storage Tank</u>	<u>5.0</u>
<u>N.W. 67th Street</u>	<u>Ground Storage Tank</u>	<u>8.2</u>
<u>N.W. 30th Street</u>	<u>Ground Storage Tank</u>	<u>2.5</u>
<u>N.E. 79th Street</u>	<u>Elevated Storage Tank</u>	<u>2.0</u>
<u>Carol City</u>	<u>Ground Storage Tank</u>	<u>2.0</u>
<u>Total Storage</u>		<u>56.0</u>

Source: WASD's 20 year water supply plan (2014-2033)

3.3 Potable Water Level of Service Standard

~~The Town of Surfside currently coordinates with WASD to meet existing and projected demands based on level of service (LOS). The existing LOS for the Town of Surfside based on WASD goals for potable water is as follows:~~

- ~~a) The regional treatment system shall operate with a rated maximum daily capacity no less than 2 percent above the maximum daily flow for the preceding year, and an average daily capacity 2 percent above the average daily system demand for the preceding 5 years.~~
- ~~b) Water shall be delivered to users at a pressure no less than 20 pounds per square inch (psi) and no greater than 100 psi.~~
- ~~c) Water quality shall meet all federal, state, and County primary standards for potable water.~~

- d) ~~Countywide storage capacity for finished water shall equal no less than 15 percent of the Countywide average daily demand.~~
- e) ~~The level of service (LOS) standard for potable water facilities shall be 155 gallons capita per day.~~

~~The 155 gallons capita per day (gpcd) value is WASD system wide finished water rate which was calculated by taking historical data. In 2007 the actual gpcd value for the town of surfside was 206 gpcd. The Town of Surfside is aware of this high gpcd value and is currently working with WASD to implement Water efficiency plans, public education, and BMPs to reduce the Town of Surfside's gpcd value.~~

~~3.4 Population and Potable Water Demand Projections by Each Local Government Utility~~

~~For the purposed of this report WASD population projections will be used to calculate projected water demands. WASD gathered population data found in Table 3.1 from Miami Dade County Department of Planning and Zoning (P&Z) and was derived from Transportation Analysis Zones (TAZ). The population projection were presented and accepted by the South Florida Water Management District (SFWMD).~~

**Table 3.1
WASD Gathered Population Data**

Municipality	Municipal Population Projections					
	Year					
	2007	2010	2015	2020	2025	2030
Town of Surfside	5,159	5,280	5,483	5,680	5,878	6,076

~~Source: Miami Dade County Planning and Zoning Department, WASD 20 Year Water Supply Plan.~~

~~Population projections for WASD's entire service area in five year increments from year 2007 to 2027 and year 2030 are shown in Table 3.3. Overall, the population served by WASD is expected in increase approximately 26.2% from year 2006 to year 2030. WASD's population projections are illustrated in Section 3.0 Table 3.2.~~

**Table 3.3
WASD Population Projections**

Year	Total WASD	Total County
2007	2,250,944	2,404,805
2012	2,340,221	2,670,560
2017	2,487,519	2,834,172
2022	2,600,268	2,970,533
2027	2,731,018	3,124,804
2030	2,804,068	3,212,111

~~Source: Miami Dade Planning & Zoning Department~~

The Town of Surfside does not provide its own water supply and as a result it purchases water from WASD. The following projections are based on the WASD 20-Year Water Supply Facilities Work Plan.

HISTORIC WATER DATA**Historic Population**

This section presents historical and projected population projections from Year 2010 through Year 2033 for WASD's service area. Population data were obtained from the Miami-Dade County Department of Regulatory and Economic Resources (RER), Planning Division, based on the 2010 Census and derived from Transportation Analysis Zone (TAZ). On June 20, 2014, WASD submitted an application for modification and extension of the 20-year Water Use Permit (WUP) No. 13-00017-W. The modification and extension to the current WUP are a result of revised population projections based on the 2010 Census and the continued successful implementation of the County's Water Conservation Plan. The requested modification to the WUP included new population data, revised water demand projections and alternative water supply projects to support water demands through the year 2033. WASD's Reuse projects were listed but they are not required to address water supply. The revised population projections for the year 2030 are consistent or slightly lower, than the projections in the District's Lower East Coast Water Supply Update, dated September 2013.

Historical populations served by the WASD system are shown in Table 3.2 in one year increments from Year 2004 to Year 2013. The population in the WASD's service area grew approximately 2.8% between Year 2010 and year 2013. The WASD system served approximately 86% of the County's total population in 2013. Table 3.2 also provides a summary of historical use for both finished water and raw water.

Table 3.42
TOWN OF SURFSIDE HISTORIC WATER DATA
MIAMI DADE WATER AND SEWER DEPARTMENT
HISTORIC POPULATION AND WATER USE

Municipality	Water Consumptions (MGD)			Municipal Population			Per Capita		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
Town of Surfside	4.06	4.09	4.06	6078	6149	6169	209	214	206

~~Source: Miami Dade County WASD.~~

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
FINISHED WATER HISTORICAL USE							RAW WATER HISTORICAL USE ^(a)					Ratio Finished:Raw (Total Annual Use)
Year	Population Served *	Per Capita Usage (gpcd)	Total Annual Use (MG)	Average Month Use (MG)	Max Month Use (MG)	Ratio Max : Aver. Month	Per Capita Usage (gpcd)	Total Annual Use (MG)	Average Month Use (MG)	Max Month Use (MG)	Ratio Max : Aver. Month	
TOTAL MDWASD WATER SYSTEM SERVICE AREA **												
<u>2004</u>	<u>2,090,099</u>	<u>162.5</u>	<u>124,301</u>	<u>10,358</u>	<u>10,861.1</u>	<u>1.05</u>	<u>165.6</u>	<u>126,685</u>	<u>10,557</u>	<u>11,063</u>	<u>1.05</u>	<u>1.019</u>
<u>2005</u>	<u>2,101,772</u>	<u>161.8</u>	<u>124,098</u>	<u>10,342</u>	<u>10,734.8</u>	<u>1.04</u>	<u>165.1</u>	<u>126,670</u>	<u>10,556</u>	<u>11,031</u>	<u>1.04</u>	<u>1.021</u>
<u>2006</u>	<u>2,113,445</u>	<u>161.6</u>	<u>124,677</u>	<u>10,390</u>	<u>10,988.6</u>	<u>1.06</u>	<u>164.7</u>	<u>127,019</u>	<u>10,585</u>	<u>11,170</u>	<u>1.06</u>	<u>1.019</u>
<u>2007</u>	<u>2,125,118</u>	<u>150.3</u>	<u>116,602</u>	<u>9,717</u>	<u>10,485.4</u>	<u>1.08</u>	<u>151.6</u>	<u>117,585</u>	<u>9,799</u>	<u>10,648</u>	<u>1.09</u>	<u>1.008</u>
<u>2008</u>	<u>2,136,791</u>	<u>138.1</u>	<u>108,029</u>	<u>9,002</u>	<u>9,583.0</u>	<u>1.06</u>	<u>149.4</u>	<u>116,820</u>	<u>9,735</u>	<u>10,508</u>	<u>1.08</u>	<u>1.081</u>
<u>2009</u>	<u>2,148,464</u>	<u>142.3</u>	<u>111,627</u>	<u>9,302</u>	<u>9,662.7</u>	<u>1.04</u>	<u>151.2</u>	<u>118,575</u>	<u>9,881</u>	<u>10,550</u>	<u>1.07</u>	<u>1.062</u>
<u>2010</u>	<u>2,160,138</u>	<u>141.4</u>	<u>111,453</u>	<u>9,288</u>	<u>9,700.0</u>	<u>1.04</u>	<u>151.0</u>	<u>119,056</u>	<u>9,921</u>	<u>10,346</u>	<u>1.04</u>	<u>1.068</u>
<u>2011</u>	<u>2,181,073</u>	<u>140.2</u>	<u>111,585</u>	<u>9,299</u>	<u>9,597.6</u>	<u>1.03</u>	<u>149.2</u>	<u>118,768</u>	<u>9,897</u>	<u>10,273</u>	<u>1.04</u>	<u>1.064</u>
<u>2012</u>	<u>2,202,008</u>	<u>134.8</u>	<u>108,626</u>	<u>9,052</u>	<u>9,693.9</u>	<u>1.07</u>	<u>142.5</u>	<u>114,807</u>	<u>9,567</u>	<u>10,223</u>	<u>1.07</u>	<u>1.057</u>
<u>2013</u>	<u>2,222,944</u>	<u>136.5</u>	<u>110,388</u>	<u>9,199</u>	<u>9,483.7</u>	<u>1.03</u>	<u>144.6</u>	<u>117,623</u>	<u>9,802</u>	<u>10,252</u>	<u>1.05</u>	<u>1.066</u>
3-year Average (2011- 2013)	:	<u>137.2</u>	:	:	:	<u>1.04</u>	<u>145.4</u>	:	:	:	<u>1.05</u>	<u>1.062</u>

Source: WASD's 20 year water supply plan (2014-2033)

~~Table 3.4 indicates historic potable water consumed by the Town of Surfside. Table 3.4 was developed by gathering billing data from the Town of Surfside and Miami Dade Water and Sewer Department (WASD).~~

Water DemandPopulation Projections

~~The Town of Surfside does not provide its own water supply and as a result it purchases water from WASD. The following projections are based on WASD 20-Year Water Supply Facilities Work Plan.~~

Population projections for WASD's service area in five year increments from Year 2014 to 2033 are shown in Table 3.3. Overall, the population served by WASD is expected to increase approximately 17.78% from Year 2014 to Year 2033. In 2033, WASD will serve potable water to approximately 85% of the total County population.

Table 3.3
Population Projections to be Served by WASD

<u>Year</u>	<u>Total WASD</u>	<u>Total* County</u>
<u>2014</u>	<u>2,243,879</u>	<u>2,604,590</u>
<u>2015</u>	<u>2,266,092</u>	<u>2,631,629</u>
<u>2020</u>	<u>2,370,769</u>	<u>2,766,823</u>
<u>2025</u>	<u>2,475,446</u>	<u>2,902,018</u>
<u>2030</u>	<u>2,580,123</u>	<u>3,037,212</u>
<u>2031</u>	<u>2,601,058</u>	<u>3,064,251</u>
<u>2032</u>	<u>2,621,994</u>	<u>3,091,289</u>
<u>2033</u>	<u>2,642,929</u>	<u>3,118,328</u>

Source: WASD's 20 year water supply plan (2014-2033)

Water Demand Projections

~~WASD water demand projections are based on initial system-wide finished water daily per capita use rate of 155 gallons per capita per day (gpcd). Historic raw and finished water uses for year 2001 through year 2006 are illustrated in Table 3.5. In addition, Table 3.6 provides the projected raw and finished water use for year 2007 through year 2030. Table 3.6 also provides projected raw water from the Biscayne and Floridan Aquifer in five year increments to indicate future demands. Finally, Table 3.7 provides water supply demands according to wholesale customers.~~

The water demand projections presented herein are based on initial system-wide finished water daily per capita use rate of 137.2 gallons per capita per day (gpd), a decline from 155 gpd in the previous WASD water supply plan adopted April 2008. The per capita use was determined by taking a 3-year average from 2011 to 2013.

Table 3.4 provides the projected water use for Year 2014 through Year 2033 for the WASD service area.

Table 3.5
Miami-Dade Water and Sewer Department (WASD)
Past Water Use (2001-2006)

Year	FINISHED WATER HISTORICAL USE						RAW WATER HISTORICAL USE				
	Population served	Per Capita Usage (gpcd)	Total Annual Use (MG)	Average Month Use (MG)	Max Month Use (MG)	Ratio Max: Average Month	Total Annual Use (MG)	Average Month Use (MG)	Max Month Use (MG)	Ratio Max: Average Month	Ratio Finished: Raw (Total Annual Use)
TOTAL WASD WATER SYSTEM SERVICE AREA											
2001	2,073,670	151.28	114,403	9,544	9,927.6	1.04	117,150	9,763	10,120	1.04	1.0233
2002	2,103,951	156.99	120,614	10,051	10,861.4	1.09	122,934	10,244	11,163	1.09	1.0192
2003	2,134,223	158.51	123,511	10,293	10,676.1	1.04	126,884	10,400	10,878	1.04	1.0192
2004	2,164,495	156.90	124,301	10,368	10,861.1	1.05	126,885	10,557	11,063	1.05	1.0192
2005	2,194,768	154.96	124,098	10,344	10,734.8	1.04	126,670	10,556	11,034	1.04	1.0207
2006	2,225,040	153.30	124,677	10,390	10,988.6	1.06	127,010	10,585	11,170	1.06	1.0188
	5-year average (02-06)	156.13			3-year average (04-06)	1.05			3-year average (04-06)	1.05	1.02

Source: Miami-Dade County Planning and Zoning Department, WASD 20 Year Water Supply Plan.
From WASD Raw and Finished Water Historical Data 2001-2006

Table 3.64
Miami-Dade Water and Sewer Department (WASD) Water Demand Projection

Year	Population	Finished Water Use (gpcd)	AADD Finished Water Use (MGD)	Water Conservation (MGD) Credit	Adjusted Finished Water Demand (MGD)	Adjusted Finished Water Use (gpcd)
2007	2,250,944	155	348.90	1.09	347.81	154.52
2008	2,230,894	155	345.79	2.24	343.55	154.00
2009	2,280,476	155	350.37	3.63	346.84	153.44
2010	2,290,958	155	354.96	4.82	350.14	152.90
2011	2,310,639	155	359.54	6.34	353.20	152.27
2012	2,340,224	155	364.13	7.77	356.36	151.69
2013	2,378,803	155	368.71	9.28	359.43	151.10
2014	2,408,385	155	373.30	10.99	363.21	150.81
2015	2,438,810	155	378.02	10.89	367.13	150.53
2016	2,463,169	155	381.79	11.70	370.09	150.25
2017	2,487,510	155	385.57	12.51	373.06	149.97
2018	2,511,860	155	389.34	13.30	376.04	149.71
2022	2,609,268	155	404.44	16.46	387.98	148.69
2027	2,731,018	155	423.31	19.62	403.69	147.82
2030	2,804,068	155	434.63	19.62	415.01	148.00

Year	Population ¹	Finished Water Use (gpd)	AADD ² Finished Water Use (gpd)	Water ³ Conservation Credit (MGD)	Reuse ⁴ Reclaimed Water Credit	Adjusted ⁵ Finished Water Demand (MGD)	Adjusted Finished Water Use (gpd)
2014	2,243,879	137.2	307.19	1.3	0.00	306.43	136.56
2015	2,266,092	137.2	310.84	2.0	0.00	308.80	136.27
2020	2,370,769	137.2	325.20	5.4	0.00	319.76	134.88
2025	2,475,446	137.2	339.56	8.8	0.00	330.72	133.60
2030	2,580,123	137.2	353.92	9.5	0.00	344.37	133.47
2031	2,601,058	137.2	356.79	9.5	0.00	347.24	133.50
2032	2,621,994	137.2	359.66	9.5	0.00	350.11	133.53
2033	2,642,929	137.2	362.53	9.5	0.00	352.98	133.56

Source: Miami-Dade County Planning and Zoning Department, WASD 20-Year Water Supply Plan.
Source: WASD's 20 year water supply plan (2014-2033)

Footnotes

- (1) Population Served represents the TAZ population projections based on 2010 Census Data provided by the MDC RER Planning Division.
- (2) Annual Average Daily Demand (AADD) Finished Water Projections between 2014 and 2033 assume 137.2 gpcd (a decrease from 145.4 gpcd total water system demand prior to application of credits (e.g. conservation).
- (3) WASD has implemented a 20-year water use efficiency plan and is experiencing reductions in per capita water consumption. Water Conservation projections were revised based on the 2010 Annual Water Conservation Plan Conserve Florida Report (March 2011). Real losses in non-revenue water (e.g. unaccounted-for-water) are assumed to remain at less than 10%. The conservation amounts experienced through 2010 (6.54 MGD) were deducted from the 20-year conservation amount in the Conserve Florida Report and the remaining conservation amounts were distributed for the balance of the 20-year period (2011-2027).
- (4) Not Used
- (5) Adjusted after taking credit in finished water demand projections for reductions in finished water use associated with water conservation.

**Table 3.7
Water Supply Service-Area
Wholesale Customers**

Municipality	Water Supply by WASD-Projected AADF Finished Water (mgd)—165 gpcd					
	Year					
	2007	2010	2015	2020	2025	2030
Bay Harbour	0.63	0.65	0.68	0.71	0.74	0.77
Bay Harbour Islands	0.06	0.09	1.04	1.08	1.12	1.17
Hialeah	35.40	36.42	38.13	39.35	40.58	41.81
Hialeah Gardens	3.62	3.84	4.20	4.57	4.93	5.30
Indian Creek Village	0.01	0.01	0.01	0.01	0.01	0.01
Medley	0.09	0.10	0.11	0.11	0.12	0.13
Miami Beach	16.47	17.15	18.29	19.30	20.30	21.31
Miami Springs	2.42	2.45	2.51	2.55	2.59	2.63
North Bay Village	1.25	1.30	1.38	1.45	1.53	1.61
North Miami	10.75	11.24	13.0	12.43	13.09	13.44
North Miami Beach	7.60					n/a
Opa Locka	2.86	2.91	3.01	3.09	3.17	3.25
Surfside	0.89	0.92	0.95	0.98	0.91	0.94
Virginia Gardens	0.33	0.34	0.35	0.36	0.38	0.39
West Miami	0.01	0.02	0.02	0.03	0.03	0.03
Total	84.17	79.14	84.47	86.82	90.32	93.65

Source: 2007 Miami Dade 20 Year Water Supply Plan.

~~3.5 Water Supply Provided by Other Entities~~

~~The Miami-Dade County 20-Year Water Supply Facilities Work Plan was completed in 2008. The intent of the County Work Plan is to meet the statutory requirements mentioned in subsection 1.2 of this plan and to coordinate WASD's water supply initiatives with the Lower East Coast Water Supply Plan Update, prepared by the South Florida Water Management District.~~

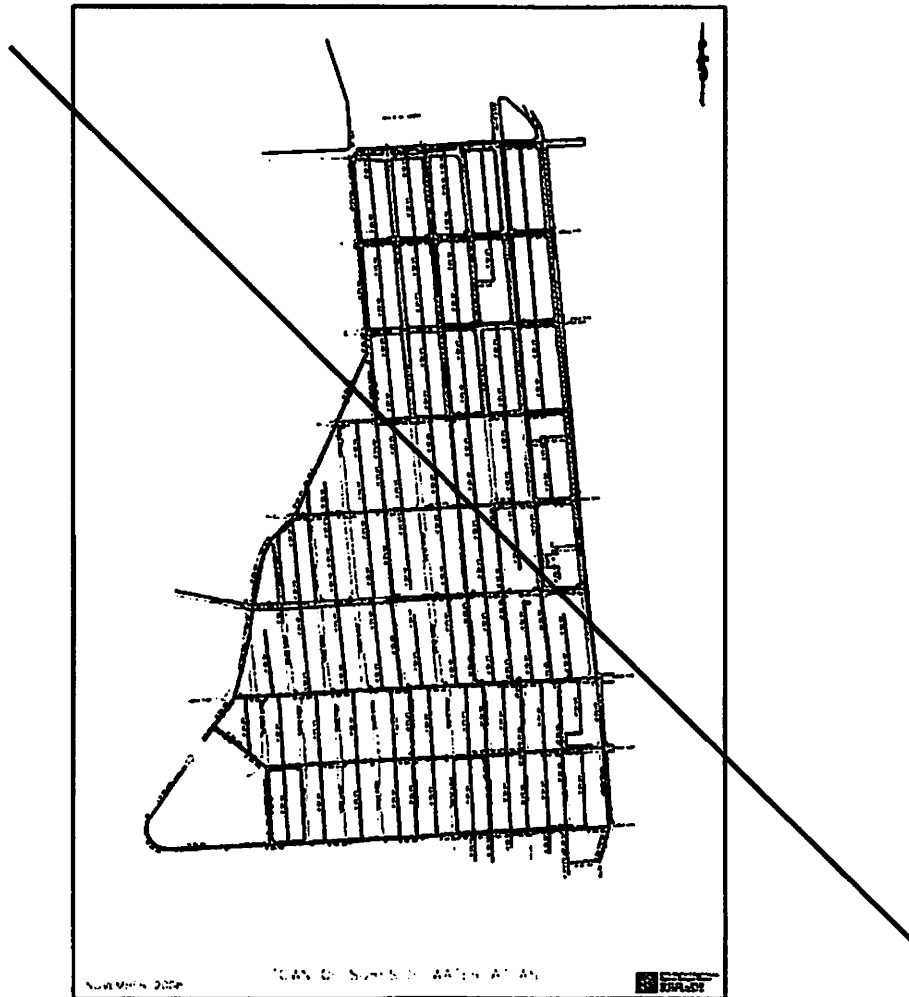
~~The WASD's service area is the entire Miami-Dade County within the Urban Development Boundary (UDB), excluding portions of North Miami, North Miami Beach, Homestead and Florida City. The areas within the Urban Expansion are included in the planning horizon after 2015. The following summarizes WASD Work Plan:~~

- ~~➤ Description of population and water demand projections (Table 3.6 and 3.7 Water Supply Service Area, Retail and Wholesale Customers, respectively, by Municipality provides municipal population projections and projected AADF "Annual Average Daily Flow" finished water based on 155 gpcd. The population information was derived from Miami-Dade County Department of Planning and Zoning Transportation Analysis Zone (TAZ) 2004 population data. This subsection also provides a brief discussion of WASD's conservation and reuse programs.);~~
- ~~➤ Water Supply Facilities Work Plan details the facilities and proposed alternative water supply (AWS) projects that are planned in order to meet the water demands through 2030. The intent of the AWS projects is to assist WASD in meeting the water demands within their respective service area. These projects are expected to be completed increments consistent with the projected growth set forth in the Plan. The AWS projects and annual average daily demand (AADD) assumes that all current wholesalers will remain in WASD system through 2030, except for the City of North Miami Beach. The AWS projects are included in the County's Capital Improvement Element.~~

~~In the 20-Year Work Plan, WASD is committed to meet the water demand for the municipalities within the service area. The Town of Surfside is served by the Hialeah-Preston subarea. The Hialeah and John E. Preston WTPs are located at 200 W. 2nd Avenue and 1100 W. 2nd Avenue, respectively. The adjacent facilities in Hialeah share interconnected source water and finished water storage capacity. These two plants serve the Hialeah-Preston subarea, generally, the service area that lies north of Flagler Street. The two plants have similar treatment processes. The Hialeah-Preston WTPs are to receive groundwater from five Upper Floridan Aquifer wells located in the Miami Springs Wellfield and the Northwest Wellfield. These blending activities of brackish and fresh water are~~

~~proposed to occur at the Hialeah Preston WTPs by 2010. There are plans to re-rate and upgrade the Hialeah WTP to a capacity of 70 mgd, if necessary. The Town of Surfside water distribution system consists of 11 miles of cast iron pipe installed in 1938 (see Figure 3-2). Primary mains feeding the system run under the Town's streets and vary in size from 6-inch to 16-inches in diameter, which feed three-inch and four-inch water lines located along the rear property lines. The four-inch lines provide service. The existing meters are constantly being calibrated and serviced to improve the accuracy of the flow readings for the entire system. The service area is the municipal boundary.~~

Figure 3-2



3.6 Conservation

Countywide Issues

The Miami-Dade Water Use Efficiency Plan

Currently, the Miami-Dade Water and Sewer Department (WASD) is implementing all Best Management Practices (BMPs) included in the 20-year Water Use Efficiency Plan, which was approved by the South Florida Water Management District. The Town of Surfside is currently working with WASD to implement the efficiency plan. The Town's Engineers are currently evaluating the existing water system by gathering data and performance data analysis to identify any type of flaws in the system. City engineers coordinate existing and proposed projects with WASD to assure all BMPs are being met.

Water Conservation Plans and Development Codes

In addition, all of WASD's wholesale customers are required to submit a Water Conservation Plan to the Department's Water Use Efficiency Section as mandated by County Ordinance 06-177, Section 32-83.1 of the Miami-Dade County Code. The Plan is currently in the process of being adopted by the Town of Surfside. The plan will identify BMPs based on population characteristics and type of service for each municipal service area.

Miami-Dade County has developed recommendations for new development that would achieve higher water use savings than currently required by code. The recommendations were developed by an Advisory Committee and were presented to the Board of County Commissioners (BCC) on June 5, 2007. These Water Conservation recommendations were adopted by Ordinance on February 5, 2008. The Ordinance requires that a manual for implementation of the recommendations be developed by July 2008. These Water efficiency recommendations represent an additional 30% to the water savings identified in the 20-year Water Use Efficiency Plan. All applicants will be required to comply with these future code requirements. The list of recommendations submitted to the BCC and the Ordinance relating to water use efficiency standard are presented in Appendix D and are also posted in the Miami-Dade Water Conservation Portal.

Per Capita Consumption

Furthermore, Miami-Dade Water and Sewer Department will establish per capita consumption for all municipalities including those in WASD's retail customer service area. Based on this data, the Department will work with the municipalities to address those with higher than average per capita's and will target programs for these areas. The County anticipates that the implementation of the BMPs identified in the 20-year Water Use Efficiency Plan will result in an adjusted system-wide per capita of 155 gpcd by year 2027.

~~Historically the Town of Surfside's per capita value was over the system average of 155 gpcd. The Town of Surfside is aware of the high per capita value and is currently working with WASD to reduce the per capita value down to 155 gpcd by 2010.~~

~~The Town of Surfside will continue to comply with all Miami-Dade County water use efficiency requirements. The Town of Surfside recently completed the Utility Profile required by County Ordinance 06-177, and will continue to work with WASD's Water Use Efficiency Section to develop the Town's Water Conservation Plan and identify best management practices (BMPs).~~

~~3.7 — Local Government Specific Actions, Programs, Regulations, Opportunities~~

~~The Town will coordinate future water conservation efforts with WASD and SFWMD to ensure that proper techniques are applied. In addition, the Town will continue to support and expand existing goals, objectives and policies in the comprehensive plan that promotes water conservation in a cost-effective and environmentally sensitive manner. The Town will continue to actively support the SFWMD and Miami-Dade County in the implementation of new regulations or programs that are design to conserve water during the dry season.~~

~~The Town of Surfside engineers are aware of the need for future water conservation and will coordinate with WASD and the SFWMD to assure BMPs, regulations, and other conservation plans are being implemented.~~

~~3.8 — Regional and County-wide Issues~~

~~For the past years, the State of Florida is leading the nation in water reuse. The water reuse effort in the state is primarily led by utilities, local governments, the water management districts and state agencies. The intent of their efforts is to implement water reuse programs that increases the volume of reclaimed water used and promotes public acceptance of reclaimed water. In addition to the public and private efforts, there are two sections of the Florida Statutes (Secs.403.064(1) and 373.250(1) F.S.) that promote water reuse as a formal state objectives. According to the Florida Statutes, "These sections further conclude that water reuse programs designed and operated in compliance with Florida's rules governing reuse are deemed protective of public health and environmental quality." In addition, Section 403.064(1), F.S., concludes that "reuse is a critical component of meeting the state's existing and future water supply needs while sustaining natural systems."~~

~~The Town of Surfside is in full support of the water reuse initiatives under consideration by both the SFWMD and Miami-Dade County. The County has committed to implement a total of 170 mgd of water reuse as noted in the County's 20-year water use permit. In the 20-year Work Plan, the County~~

~~identified a number of water reuse projects and their respective schedule. According to the Work Plan, "reuse projects will recharge the aquifer with highly treated reclaimed water and will be in place before additional withdrawals over the base condition water use are made from the Alexander Orr and South Dade sub-area wellfields. In addition, reuse irrigation projects are anticipated for the North and Central District Wastewater Treatment Plants. These projects will be implemented in the City of North Miami and North Miami Beach, and currently under construction for Key Biscayne."~~

~~3.9 Reuse~~

~~The Town of Surfside currently does not have a wastewater treatment facility, therefore no reuse system currently online. The Town of Surfside is in full support of the water reuse initiatives under consideration by both the SFWMD and Miami Dade's WASD.~~

4.0 CAPITAL IMPROVEMENTS

As shown in the water demand projections presented above, the WASD's projected finished water demands are now significantly lower than anticipated when the first 20-year water use permit application was submitted to South Florida Water Management District (SFWMD) in 2007. The updated water demand projections have resulted in 71 million gallons per day decrease by the year 2030. This demand reduction has eliminated the anticipated supply shortages which were the basis for an ambitious schedule of several costly alternative water supply projects which are no longer required or needed. As such, reuse projects to address water supply have been eliminated. However, MDWASD will be implementing a total of 117.5 mgd of reuse to address the Ocean Outfall Legislation which includes 27.6 mgd of Floridan Aquifer Recharge and up to 90 mgd of reuse water to FPL for Turkey Point Units 5, and 6.

4.1 Work Plan Projects

The following proposed alternative water supply (AWS) projects are to meet MDWAS's increased water demands through 2030, which encompasses the proposed 20-year Consumption Use Permit period. AWS projects have been identified to meet water demands in the WASD service area and are presented in Table 4.1 and Figure 5-1 (of the MSWASD 20 Year Water Supply Plan). It is important to note that any improvements made to the Hialeah Preston Plant have direct affects on the Town of Surfside and neighboring local governments. Improvement made to the plant will increase the capacity and allow opportunity for future redevelopment within its service areas. based on the projected decrease in water demands through the year 2033 reflected in the application for

modification and extension of the 20-year Water Use Permit (WUP) submitted by the WASD on June 20, 2014. Water conservation activities are funded annually through the operations and maintenance budget and are therefore not included in the capital budget.

The improvements described herein in Table 4.1 and illustrated in Figure 4.1 will be sufficient to meet water demand through the 20-year planning horizon. These projects assume that all current wholesalers will remain on the WASD system through 2033.

**Table 4.1
Proposed Alternative Water Supply Projects**

<u>Year</u>	<u>Annual Average Finished Water Quantity in MGD and Source</u>		
2007	7.20	ASR Ultraviolet (UV) Disinfection System for ASR Sys. @ W&SW Wellfield	AWS
2009	4.70	Floridan Aquifer Blending Wellfield at Hialeah/Preston	AWS
2011	8.50	Hialeah Floridan R.O. W.T.P. Phase 1 (WTP Initial Capacity 10.0 MGD)	AWS
2012	2.00	North District W.W.T.P. Reuse Projects	Credit
2012	1.00	Central Distr. W.W.T.P. Reuse Project	Credit
2013	18.60	South Distr. W.W.T.P. Groundwater Recharge Ph 1	Offset
2017	4.50	Hialeah Floridan R.O. W.T.P. Phase 2 (WTP Total Capacity 15.0 MGD)	AWS
2020	21.00	West District W.R.P. Canal Recharge Ph 2	Offset
2025	16.00	West District W.R.P. Canal Recharge Phase 3	Offset
2027	2.00	Hialeah Floridan R.O. W.T.P. Phase 3 (WTP Total Capacity 17.5 MGD)	AWS
Subtotal	85.50		
Water Conservation	19.62	20-year Water Use Efficiency Plan (4/6/2007)	Credit
Total	105.12		

Note:

Non-revenue potential real water loss reduction target is 14.25 MGD by 2017

No credit give for reuse projects in North District and Central District W.W.T.P.s. Future credits may be given to offset increases in per capita consumption.

Source: WASD 20-Year Water Supply Facilities Work Plan

<u>Year</u>	<u>Project Title</u> <u>Annual Average Finished Water Quantity in MGD</u>		<u>Source</u>
<u>2013</u>	<u>7.5</u>	<u>Hialeah Floridan Aquifer RO WTP-Phase 1-a, 10 MGD & 6 Floridan Aquifer supply wells</u>	<u>AWS</u>
<u>2015</u>	<u>2.5</u>	<u>Hialeah Floridan Aquifer RO WTP-Phase 1-b, 4 Floridan Aquifer supply wells</u>	<u>AWS</u>
<u>2018</u>	<u>12.45</u>	<u>South Miami Heights WTP Phase 1 (RO portion)</u>	<u>AWS</u>
<u>2030</u>	<u>5.0</u>	<u>South Miami Heights WTP Phase 2 (RO portion)</u>	<u>AWS</u>
Total	27.45		

Source: WASD's 20 year water supply plan (2014-2033)

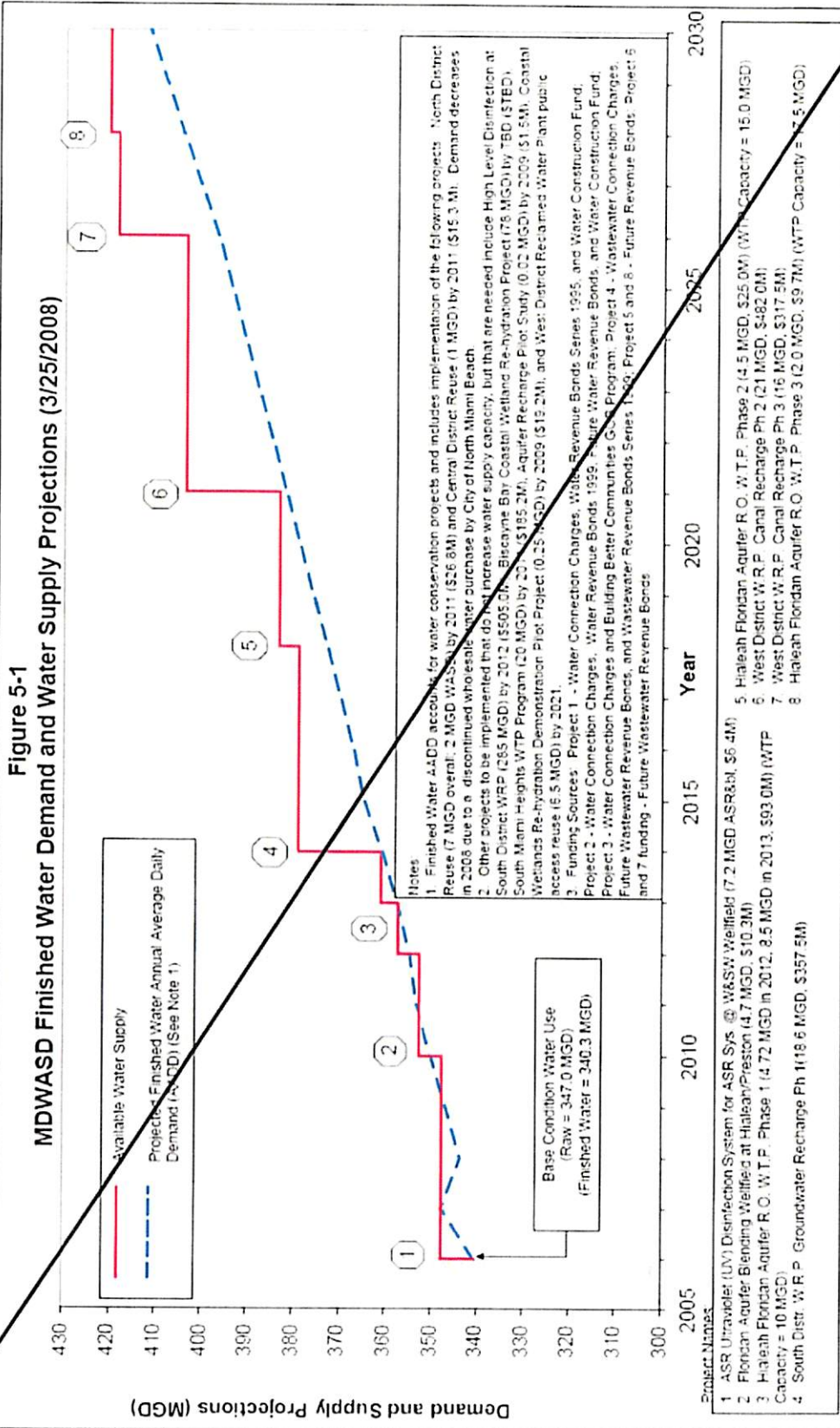
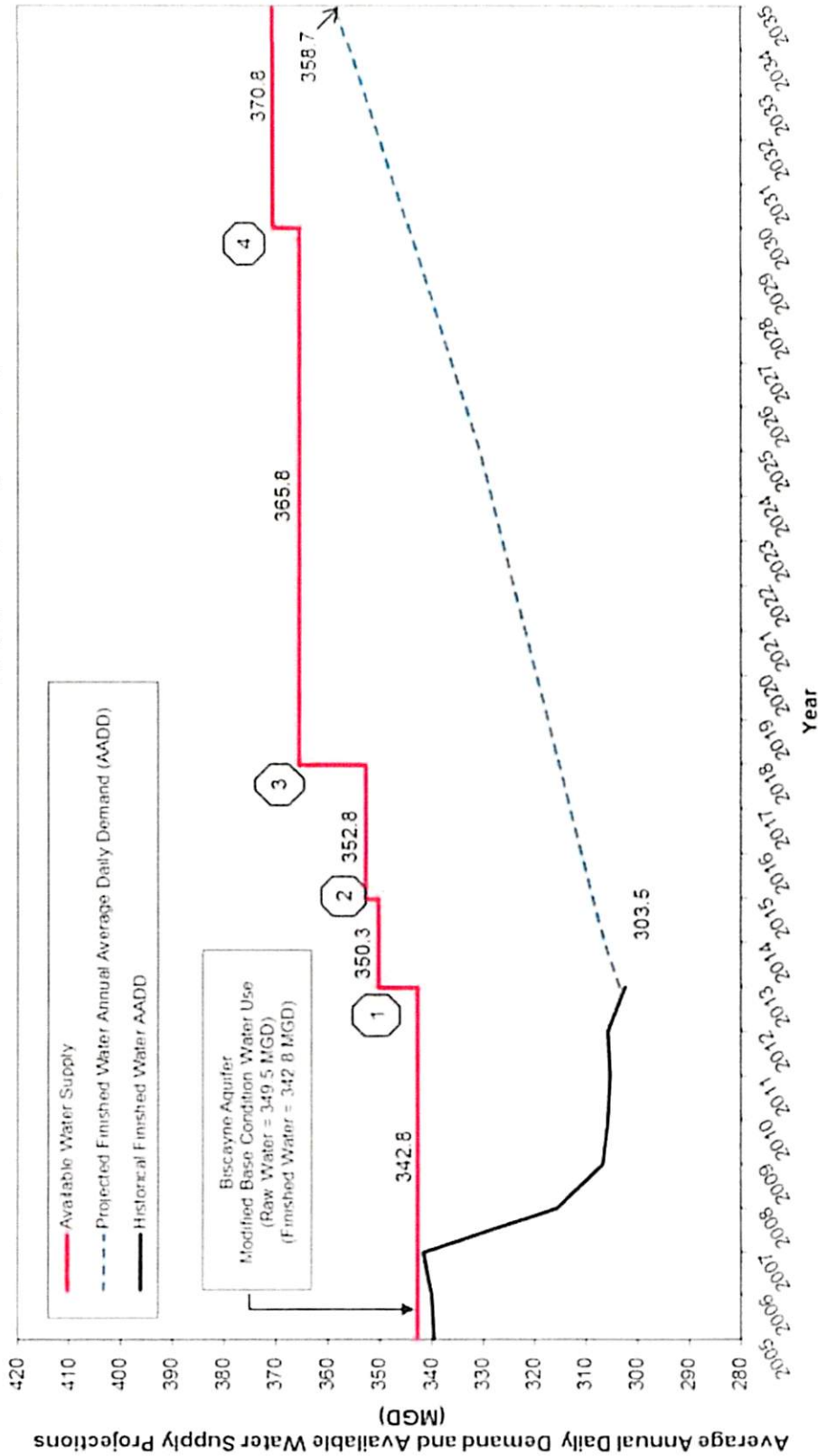


Figure 5-1 (continued)

Source: W&SW 20-Year Water-Supply-Facilities-Work-Plan

Figure 4.1
MDWASD Alternative Water Supply (AWS) Projects (September 2014)



Available Water Supply
Projected Finished Water Annual Average Daily Demand (AADD)
Historical Finished Water AADD

Biscayne Aquifer Modified Base Condition Water Use (Raw Water = 349.5 MGD) (Finished Water = 342.8 MGD)

1
2
3
4

Available Water Supply
Projected Finished Water Annual Average Daily Demand (AADD)
Historical Finished Water AADD

303.5
370.8
358.7
365.8
350.3
352.8
342.8

Year

Note
 Year represents actual and projected flows and capacities at year ending on December 31 each year

AWS Projects
 1 Hialeah Floridan Aquifer R.O. W.T.P. Phase 1a (Capacity 7.5 MGD, Operational 12/31/13)
 2 Hialeah Floridan Aquifer R.O. W.T.P. Phase 1b (2.5 MGD addition, Capacity 10.0 MGD, Available 12/31/15)
 3 South Miami Heights Biscayne-Floridan Aquifer R.O. W.T.P. Phase 1 (Capacity 15 MGD max day, 13 MGD aver Oper 12/31/18)
 4 South Miami Heights Additional Floridan Aquifer R.O. W.T.P. Phase 2 (Capacity 20 MGD max day, 18 MGD aver Oper 12/31/30)

Source: WASD's 20 year water supply plan (2014-2033)

4.2 Capital Improvements/Schedule

As mentioned in the previous sections, the latest lower population projections based on the 2010 Census results and historically lower per capita daily finish water use have reduced the projected finish water demands, eliminating the need for other alternative water supply projects by several years. The WASD Water and Alternative Water Supply (AWS) projects to address water demands through 2033 include the Hialeah RO and South Miami, shown in **Figure 4.12** and **Figure 4.2** and summarized further below to be completed in increments commensurate with the projected growth. **Table 4.2** indicated WASD Water/Alternative Water Supply CIE Program.

Figure 4.12
WASD Water/Alternative Water Supply CIE Projects

Project Name	Expenditure ^(a)						Six Year Totals
	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	
Water Facilities							
South Miami Heights W.T.P. & Wellfield	17.11	46.20	43.80	5.19	0.00	0.00	112.31
Hialeah Floridan Aquifer R.O.W.T.P. Phase 1 (10.0 mgd)	23.79	4.77	1.34	7.383	4.08	6.09	47.48

Source: WASD's 20 year water supply plan (2014-2033); Expenditures are in millions of dollars

Hialeah Floridan Aquifer R.O. W.T.P (10 MGD)

A new upper Floridan Aquifer Reverse Osmosis (RO) water treatment plant was constructed in 2013, and is located at 4250 W. 114th Terrace in the City of Hialeah. The WTP was constructed pursuant to a Joint Participation Agreement between the City of Hialeah and the County which was approved by the Board of County Commissioners on July 24, 2007 and called for the design, construction, and operation of a water treatment plant constructed in the annexation area and supplied by the brackish Floridan aquifer to produce initially 10 mgd with the capacity to expand to 17.5 mgd. Approval from the Florida Department of Health to produce and distribute water was received in November 2013. The WTP utilizes the Floridan Aquifer as the alternative water supply using the RO treatment to remove the salt. The initial operational phase of the Plant is 7.5 mgd, increasing to 10 mgd by the end of 2015 when construction of additional wells is expected to be completed.

Phase 1-a (7.5 MGD) - Completed 2013

Phase 1-a of the RO WTP included a 10 mgd plant and an initial six (6) Floridan Aquifer supply wells. The phase 1-a cost was about \$95 million.

Phase 1-b (2.5 MGD) - Start 2014/Finish 2015

Phase 1-b of the RO WTP will consist of the construction of four (4) Floridan Aquifer supply wells for a maximum treatment capacity of 10 mgd. The Phase 1-b cost is estimated at approximately \$5 million.

South Miami Heights W.T.P. and Wellfield (20 MGD)

17.45MGD Floridan Aquifer RO and 2.55 MGD Biscayne Aquifer

Start 2014/Finish 2018

Design of the South Miami Heights (SMH) Water Treatment Plant (WTP) and Wellfield began commencement in 2014. The WTP will be located at 18800 SW 208 Street in Miami. The RO WTP and associated facilities will have a capacity to produce 20 mgd (max day) finished water using a combination of 17.45 mgd from the Floridan Aquifer and 2.55 mgd from the Biscayne Aquifer. Phase 1 will have a maximum capacity of 15 mgd to be operational by December 31, 2018, and Phase 2 will have a maximum capacity of 20 mgd, operational by December 31, 2030. A total of five (5) Biscayne Aquifer wells and seven (7) Floridan Aquifer wells are planned to be constructed.

Upon completion of the WTP, the Elevated Tank, Leisure City, and Naranja WTPs will be abandoned and their associated allocations will be transferred to the SMHs WTP. Everglades Labor Camp and Newton WTPs will remain on stand-by service.

Miscellaneous Projects

In addition to the Alternative Water Supply (AWS) projects described above, WASD will also utilize tools to evaluate and plan for sea level rise and climate change. The primary concern as it pertains to the WASD water supply is salt water intrusion into the freshwater Biscayne aquifer, the primary source of drinking water in Miami-Dade County. Results of initial evaluation and data analysis indicate that within the next thirty years WASD will be able to operate its wellfields and water treatment facilities as designed. Groundwater modeling indicates that even with a high level of projected sea level rise, the wellfields will not be impacted by salt water intrusion. Further modeling is currently underway to extend the planning scenarios fifty years out, and will include climate changes such as increases and decreases in annual precipitation and extreme weather events.

Water conservation projects are also currently being implemented by WASD as part of the County's 20-Year Water Use Efficiency Plan, expected to reduce potable water demand by 19.62 MGD over that time period. Examples of ongoing conservation projects include bathroom and kitchen retrofit, rebates for high efficiency toilets, and landscape irrigation evaluations for residential, commercial and governmental use.

Miami-Dade Reuse and Alternative Water Supply Conceptual Programs (3/25/2008)

Item	Project	Phase 1 (MGD)	Phase 2 (MGD)	Estimated Capital Construction (\$Mill)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	MLD at SOWWTP			505.0	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2	Hialeah Floridan Aquifer R.O. WTP (RTP Capacity)																	
3	Hialeah Floridan Aquifer R.O. W.T.P. Phase 1 (10.0 MGD)			93.0														
4	Hialeah Floridan Aquifer R.O. W.T.P. Phase 2 (5.0 MGD)			25.0														
5	Hialeah Floridan Aquifer R.O. W.T.P. Phase 3 (2.5 MGD)			3.7														
6	ASR Ultraviolet (UV) Disinfection System for ASR System at W&SW Wellfield (7.2 MGD ASR & blending)			6.4														
7	Floridan Aquifer Bending at Hialeah/Preston (4.7 MGD)			10.3														
8	North District W.W.T.P. Reuse Projects (7.0 MGD)	7		26.8														
9	Central District W.W.T.P. Reuse Project (1.0 MGD)	1		15.3														
10	Water Reclamation Plants (WRP) Projects																	
11	South District W.R.P. Groundwater Recharge Ph 1 (15.5 MGD)	30		357.5														
12	West District W.R.P. Canal Recharge Ph 2 (21 MGD)	28		482														
13	West District W.R.P. Canal Recharge Ph 3 (16 MGD)	21		317														
14	Miscellaneous Programs/Projects/Studies																	
15	Water Conservation/UFW Reduction Program (Up to 15.52 MGD)			25.2														
16	Biscayne Bay Coastal Wetlands Renour. Pilot			19.2														
17	Aquifer Recharge Pilot Study (20,000 GPD)	0.02		1.0														
18	Other AWS Studies/Evaluations			2.0														
19	South Miami Heights W.T.P. & Wellfield			185.2														

FIGURE 4-10
Reuse Program Schedule, mtd

Source: W&S-D 20-Year Water Supply Facilities Work Plan

Figure 4.2

Miami-Dade Reuse and Alternative Water Supply (AWS) Conceptual Programs (3/25/2008)
20-Year Water Use Permit

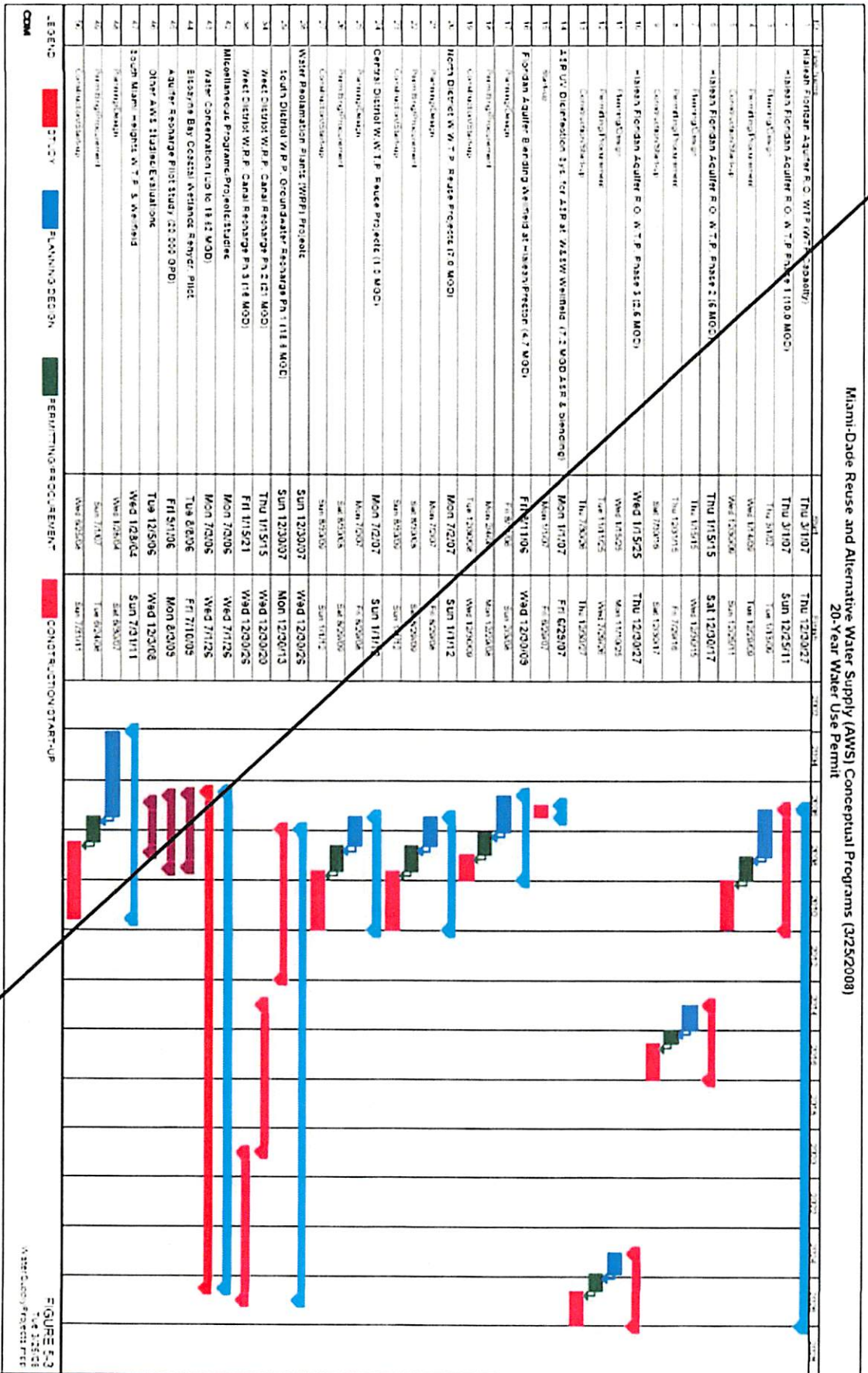


FIGURE 5.2
T-4 3/25/08
A. Serrano, Project Mgr

Source: WASD 20-Year Water Supply Facilities Work Plan

Table 4.2
WASD Water/Alternative Water Supply CIE Program

Project Name	Expenditure ^(a) (In Millions of Dollars)						Six Year Totals
	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	
Sewer Facilities							
Village of Key Biscayne Reuse Distr. System	2.85	0.00	0.00	0.00	0.00	0.00	2.85
Biscayne Bay Coastal Wetlands Rehydr. Pilot.	0.11	2.98	9.12	5.56	0.00	0.00	17.77
Aquifer Recharge Pilot Study (20,000 gpd)	0.24	2.00	0.00	0.00	0.00	0.00	2.24
North District W.W.T.P. Reuse Projects (7.0 mgd)	1.53	6.17	12.93	6.16	0.00	0.00	26.79
Central District W.W.T.P. Reuse Project (1.0 mgd)	0.90	3.36	7.03	4.00	0.00	0.00	15.29
South District W.R.P. Groundwater Recharge Ph 1 (18.6 mgd)	8.93	17.87	34.48	76.81	121.40	96.00	357.49
West District W.R.P. Canal Recharge Ph 2 (21 mgd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West District W.R.P. Canal Recharge Ph 3 (16 mgd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Biscayne Bay Coast. Wetlands Reh. (75.7 mgd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Facilities							
South Miami Heights W.T.P. & Wellfield	13.14	19.12	26.58	12.92	12.48	0.00	84.24
ASR Ultraviolet (UV) Disinfection System for ASR Syst. @W&SW Wellfield(7.2 mgd ASR&bl)	6.83	0.00	0.00	0.00	0.00	0.00	6.83
Floridan Aquifer Blending at Hialeah/Preston(4.7 mgd)	0.82	2.57	6.60	0.00	0.00	0.00	9.99
Hialeah Floridan Aquifer R.O. W.T.P. Phase 1 (10.0 mgd)	10.49	18.29	34.44	26.67	2.66	0.00	92.55
Hialeah Floridan Aquifer R.O. W.T.P. Phase 2 (5.0 mgd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hialeah Floridan Aquifer R.O. W.T.P. Phase 3 (2.5 mgd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals	45.84	72.36	131.18	134.12	136.54	96.00	616.04

Source: MDWASD CDMP CIE

^(a) December, 2006 Dollars (ENR CCI=7888)

5.0 GOALS, OBJECTIVES AND POLICIES

The Town of Surfside has adopted several new goals, objectives and policies into the Future Land Use, Potable Water, Conservation, Capital Improvement and Intergovernmental Coordination Elements of the Comprehensive Plan that address water supply sources and facilities, ~~as well as conservation and reuse programs based on the comprehensive plan requirements in Chapter 9J-5, Florida Administrative Code.~~ The Town of Surfside intends to implement and monitor compliance with this 240-Year Water Supply Facilities Work Plan throughout the 2033 planning horizon ~~the adoption and review of amendments to the Comprehensive Plan as part of its future Evaluation and Appraisal Reports.~~

6.0 CONCLUSION

~~The South Florida Water Management District has determined that the Biscayne Aquifer water source is not sufficient to meet future demands.~~ Miami Dade County Water and Sewer Department currently supplies potable water services to the Town of Surfside through a mutual agreement. Miami Dade County Water and Sewer Department has evaluated the impact of implementing new alternative water sources projects to meet the projected water demands for all their existing and proposed customers, inclusive of the Town of Surfside. ~~The wWater sSupply wWork pPlan is formulated to demonstrate~~ that the Miami Dade County Water and Sewer Department has the capacity to provide potable water to the Town of Surfside and all other their wholesale customers for the next 20-year planning period. The Town of Surfside ~~must~~ will continue to coordinate with Miami Dade Water and Sewer Department and South Florida Water Management District to reduce water consumption, conserve potable water supplies, address climate change and sea level rise, and strengthen the water supply planning processe ~~continue research and implement future projects to reduce the reliance on the Biscayne Aquifer.~~

APPENDIX A

CONTRACT
BETWEEN
MIAMI-DADE COUNTY
AND
TOWN OF SURFSIDE, FLORIDA
PROVIDING FOR THE RENDITION OF WATER SERVICE

THIS CONTRACT, made and entered into this 26th day of July, 2007 between Miami-Dade County, a political subdivision of the State of Florida, referred to as the "COUNTY" and TOWN OF SURFSIDE, a municipal corporation organized and existing under the laws of the State of Florida, referred to as the "TOWN".

W I T N E S S E T H:

WHEREAS, on May 2, 1995, the COUNTY and the TOWN entered into a Contract providing for the rendition of water service by the COUNTY to the TOWN, and

WHEREAS, on May 10, 2006, the COUNTY and the South Florida Water Management District (SFWMD) entered into a contract which requires the COUNTY to obtain twenty (20) year water service contracts with its volume water customers to coincide with the request of the COUNTY for twenty (20) year Consumptive Use Permits issued by the SFWMD, and

WHEREAS, without a twenty (20) year contract with the TOWN, the water supply source for the TOWN, may be allocated from an alternative more expensive source for the TOWN, and

WHEREAS, the COUNTY and the TOWN desire to enter into this Contract so the COUNTY can continue to render water service to the TOWN for a twenty (20) year period, and

WHEREAS, the Miami-Dade Water and Sewer Department, referred to as the "Department", operates and maintains the COUNTY's water system.

NOW, THEREFORE, in consideration of the mutual covenants and obligations set forth, the COUNTY and TOWN agree as follows:

Town of Surfside
Water Service Contract
04/09/2007

1

1. Insofar as it may be lawful to do so in accordance with the terms and limitations of any Consumptive Use Permit issued the COUNTY by the SFWMD and subsequent to the terms herein, the COUNTY shall sell and deliver to the TOWN, and the TOWN shall purchase and receive from the COUNTY all potable water necessary to fulfill the water requirements of the TOWN during the effective period of this Contract. All water delivered by the COUNTY shall be of good and potable quality satisfactory for domestic use and shall be of similar quality as that furnished to the COUNTY's other customers. Potable water obtained by the TOWN from the COUNTY may be utilized to serve the TOWN's customers in its existing water service area or future water service area(s) that the TOWN is legally authorized to serve.

2. Notwithstanding the obligations of Paragraph 1 above, if the COUNTY should have an insufficient supply of water available to fulfill the total requirements of all customers of the COUNTY due to prohibitions, restrictions, limitations or requirements of local, state or federal governments having jurisdiction over such matters or due to any other cause beyond the COUNTY's control including but not limited to those specifically set forth in Paragraph 22 below, the COUNTY shall be deemed to have fully performed its duties and to have discharged its obligations if it furnishes and delivers the TOWN's prorata share of such supply as determined by the COUNTY. The COUNTY will not be discriminatory in its delivery of water service. The COUNTY shall give expeditious notice to the TOWN whenever the COUNTY becomes aware of conditions which could reasonably lead to an outage or shortage of such potable water supply or which may bring about such condition. Notwithstanding the preceding, the County shall not be obligated to take or omit any action to ensure current or future water supply to the TOWN.

3. The TOWN agrees to be bound by existing and future standards, laws, rules and regulations which may be enacted by the COUNTY or as may be necessary to ensure continued compliance with local, state and federal laws and regulations and permit conditions.

4. The water furnished will be delivered by the COUNTY and will be accepted and received by the TOWN at the following points of delivery:

- a. 88 Street and Byron Avenue
- b. 91 Street and Byron Avenue
- c. 95 Street and Byron Avenue

Additional points of delivery may be established at such times and places as shall be mutually agreed by the Director of the Department and the TOWN. The TOWN shall bear the entire cost and expense of establishing each such additional point of delivery,

Town of Surfside
Water Service Contract
04/09/2007

2

obtaining such easements as may be needed and furnishing all necessary labor and materials required to connect with the COUNTY's main, all in accordance with plans and specifications which are subject to approval of the COUNTY. The TOWN will supply and install meter(s) and transfer ownership to the COUNTY. The TOWN shall convey to the COUNTY, by appropriate bill of sale, as shown on Exhibit "A" attached hereto, and Grants of Easements, all of the TOWN's right, title and interest in and to the tees or crosses in the feeder mains, meters, meter vaults and all piping, valves and appurtenances between and including the aforesaid tees or crosses and the valve immediately on the discharge side of the meters. The COUNTY shall thenceforth own, control, operate and maintain such facilities. Readings of each meter at all points of delivery shall be taken by the COUNTY on or about the 28th day of each month and shall be used for monthly billing purposes under the provisions of Paragraph 11 below.

5. The Parties agree and warrant that their respective water distribution and transmission system and any extensions shall be constructed, operated and maintained in accordance with the requirements of all applicable federal, state, county and other local laws, rules and regulations. The operation and maintenance of all facilities on the TOWN side of the meters shall be the responsibility of the TOWN. Upon reasonable notice that the TOWN is in violation of this Agreement, the TOWN shall provide the COUNTY with access to the TOWN's distribution and transmission system. Said inspections shall be made at reasonable times and upon reasonable notice in such manner as to least disturb the normal operation of the TOWN.

6. In order for the COUNTY to adequately plan for future water demands, within ninety days following execution of this contract and on or before each January 1 thereafter, the TOWN shall submit to the COUNTY the TOWN's projected annual water needs for the next five years. Within 120 days of the COUNTY's receipt of the TOWN's projected annual water needs for the next five years, the COUNTY will notify the TOWN of the COUNTY's ability or inability to meet such needs, which is subject to local, state and federal agencies and other regulatory bodies having jurisdiction over such matters. The TOWN agrees that the COUNTY shall not be liable or in any way responsible for any cost, claims or losses incurred by the TOWN as a result of actions by regulatory bodies.

Notwithstanding the preceding, nothing contained herein shall require the COUNTY to take or omit any action to ensure that the expected demand is satisfied. Any representation as to the County's ability to satisfy expected demands is conditional, and shall not obligate the County to deliver any specific amount of water.

7. The COUNTY shall own, operate and maintain metering stations at the points of delivery listed above which will measure all potable water delivered by the COUNTY to the TOWN. The metering stations shall be of standard make and type installed in a readily accessible location with checking or calibration devices. The installation shall indicate flow with an error not to exceed plus or minus two percent of full scale reading (true accuracy). The Department, at its sole expense, shall check the accuracy of each metering installation once every six months, or at such other time intervals as it may deem appropriate. The Department shall provide the results of the checking to the TOWN's Public Works Director no later than thirty (30) days after the meter is checked. Such checking shall be at a reasonable time, mutually agreeable to the Department and the TOWN. If found to be in error exceeding two (2) percent of true accuracy, the meter shall be recalibrated to the satisfaction of the parties. If such error of more than two(2) percent is discovered, bills for the periods following the prior meter accuracy check shall be adjusted to reflect the quantity of over-read or under-read exceeding two (2) percent. In calculating such billing adjustment it will be assumed that the meter inaccuracy existed for the entire time interval between meter accuracy tests. The billing adjustment shall be made at the same rate in effect during the period of meter inaccuracy.

8. The TOWN may request and the COUNTY agrees to perform a meter accuracy test at any reasonable time acceptable to both parties. If the meter is found to be in error exceeding two percent true accuracy, it shall be recalibrated as described above and the entire cost for such testing and recalibration shall be paid for by the COUNTY. If the meter is found performing within two (2) percent true accuracy, the meter accuracy test shall be paid for by the TOWN within thirty (30) days of receiving the COUNTY's invoice.

9. In the event of complete or partial failure of any meters to register the TOWN's water consumption, the COUNTY may determine the estimated water consumption based on the most recent twelve (12) full months of consumption measured by the meters when they were operating properly or another method mutually agreed upon by the Department and the TOWN. To the extent possible, the COUNTY shall repair all failed meters within thirty (30) days of the determination that the meter has completely or partially failed.

10. It shall be the obligation and duty of the TOWN to transmit the water at its own expense from each point of delivery to the place or places of ultimate use. The COUNTY shall not be responsible for insufficient pressure for either domestic or fire flow service, nor be required to correct any fluctuation in pressure occurring beyond any point of delivery. The existing normal level of service to the TOWN is 50-55 psig at an average

daily flow of approximately 4,000,000 gallons per day into the 30" Broad Causeway water main referenced in Paragraph 14. In the event that the pressure on the COUNTY's point of delivery drops to the low pressure telemetry alarm level setting of 40 psig, the COUNTY shall notify Surfside Police Department and the Miami-Dade County Fire Department of such low pressure alarm condition by a telephone auto-dialer (the "Auto-Dialer"). The COUNTY shall provide at least a 72 hour notice before any planned decrease in pressure which would affect the TOWN's and the Miami-Dade County Fire Department's ability to deliver services to any TOWN customer.

11. The TOWN shall pay to the COUNTY, as compensation for the treatment and transmission of all water delivered to the TOWN, a monthly charge for such service based on a uniform rate for the COUNTY's volume customers. The rate shall be calculated for each Department fiscal year based on projections from the prior Department fiscal year and based on the sum of the following:

(a) That portion of all budgeted annual operating and maintenance expenses, including taxes assessed, if any, for the COUNTY's regional water system divided by the projected total amount of flow used to bill all the COUNTY's water customers over the same time period.

(b) That portion of the budgeted annual renewal and replacement expenses for the COUNTY's regional water system divided by the total projected amount of flow used to bill all the COUNTY water customers over the same time period.

(c) That portion of the COUNTY's budgeted annual interest obligations of outstanding notes and bonds for the COUNTY's regional water system divided by the projected total amount of flow used to bill all the COUNTY water customers over the same time period.

(d) That portion of the budgeted annual charge for the amortization of the COUNTY's outstanding notes and bonds for the COUNTY's regional water system, to be consistent with the requirements under law, divided by the total projected amount of flow used to bill all the COUNTY's water customers over the same time period.

(e) That portion of the budgeted annual charge for customer counting and service, for the COUNTY's regional water system divided by the total projected of flow used to bill all the COUNTY's water customers over the same time period.

(f) That portion of projected annual administration and general expenses, for the COUNTY's regional water system, divided by the total projected amount of flow used to bill all the COUNTY's water customers over the same time period.

(g) That portion of the charge for debt service coverage requirement for bond issues for the COUNTY's regional

water system divided by the total projected amount of flow used to bill all the COUNTY's water customers over the same time period.

12. The TOWN, with the assistance of the COUNTY, shall prepare a water conservation plan for its distribution system, to the satisfaction of the COUNTY, and shall implement the tenets of such plan. This plan shall comply with applicable local, state and federal conservation rules and guidance, as appropriate. The COUNTY may impose a surcharge on the use of such amounts of water by the TOWN as could be conserved by the TOWN through the implementation of a conservation plan, provided that the surcharge is applied uniformly to all volume water customers of COUNTY. The amount of the surcharge is subject to the review and approval of the Board of County Commissioners. Water conservation is necessary to meet the public water supply demands of the COUNTY.

13. The COUNTY reserves the right to revise or modify the rate and the method of calculation included in Paragraph 11 as may be approved by the Board of County Commissioners in accordance with applicable law and the TOWN agrees to be bound thereby. The COUNTY will attempt to provide the TOWN with a preliminary rate and shall to provide such rate a minimum of six (6) weeks in advance of any rate increase effective date. The TOWN recognizes and agrees that the adopted rate may differ from the preliminary rate. The TOWN recognizes and agrees that the COUNTY intends to implement in the future such charges or rate structures, including but not limited to peak flow surcharges, as it deems necessary to fairly recover its costs for any needed infrastructure improvements. The TOWN further recognizes and agrees that the COUNTY's right to revise or modify the rate or methods of calculation under this paragraph is not limited solely to revisions or modifications allowing the COUNTY to recover costs for infrastructure improvements.

14. In addition to the monthly payment calculated in accordance with Paragraph 11 hereinabove, the TOWN shall pay to the COUNTY an asset charge representing the TOWN's proportionate share of the COUNTY's costs for the construction of water main improvements in Broad Causeway and Kane Concourse which costs are calculated as shown below:

A charge per month for interest and depreciation in an amount equal to fifteen thousand one hundred twenty-five dollars and sixty-four cents (\$15,125.64) representing seven-tenths of one percent (0.7%) of \$2,160,805 for the cost of the thirty (30) inch main in Broad Causeway; plus two thousand eight hundred dollars (\$2,800.00) representing seven-tenths of one percent (0.7%) of \$400,000 for the cost of installing the twenty-four (24) inch main in Kane Concourse. This charge shall remain in effect through December 2008.

15. For the purpose of billing the TOWN for the charges specified in Paragraph 14 hereinabove, the COUNTY will establish the TOWN's proportionate share by dividing the TOWN's metered consumption by the total water consumption of the TOWN, Indian Creek Village, Bay Harbor Islands and Bal Harbour Village.

16. The COUNTY grants the TOWN the right to audit all Department records related to the computation of the rates for each fiscal year. Upon written notice, the COUNTY shall make available for the TOWN such records at the offices of the Department on an annual basis. In the event that such audit indicates any discrepancy between the rates used by the COUNTY in computing the monthly service charges to the TOWN and the amount paid by the TOWN determined as a result of the audit, and following the COUNTY's acceptance of the audit findings, the COUNTY shall make an adjustment, for that fiscal year, in the service charges previously paid by the TOWN. The audit must be completed on or before the end of each fiscal year for which the rates apply. Adjustments shall not be made for prior fiscal years.

17. Billings for services provided in accordance with this contract shall be rendered monthly. Invoices will be mailed by the tenth day of the month following the month for which service has been provided, based on meter readings taken by Department employees on or about the 28th day of each month. Amounts billed on such invoices are due when rendered. In the event the TOWN disputes a bill, the TOWN shall provide the COUNTY with notice of the reasons for non-payment and shall escrow such portion of the bill that is disputed in an interest-bearing account. The parties shall promptly meet and use good faith efforts to resolve the dispute within forty-five(45) days of the notice. Except for any portion of a bill disputed by the TOWN, payments not received by the Department on or before twenty-five (25) days after the postmark date of the bill shall be considered past due. All past due invoices shall be subject to a late charge as established by the COUNTY, such charge to reimburse the Department for costs in processing and otherwise administering late payments. In addition, per annum interest shall accrue on the past due charges including the late charges at the maximum legal rate provided by Florida law for contracts in which no interest rate is specified, for each day, including Saturdays, Sundays and holidays, from the past due date until the date of receipt by the Department. For purposes of this paragraph, date of receipt shall be the date of actual receipt by the Department if hand delivered or mailed, or date of transfer to the Department's bank, if electronic funds transfer is used.

18. Any and all suits brought by either party shall be instituted and maintained in any court of competent jurisdiction in Miami-Dade County, Florida. In all such suits, the prevailing party shall be entitled to receive costs and reasonable attorney's fees. The amount of such costs and fees shall be determined by the court in which such actions are brought.

Town of Surfside
Water Service Contract
04/09/2007

7

19. The TOWN shall accept delivery of water transmitted at a flow rate as nearly uniform as practical throughout each daily 24-hour period during November, December, January, February, March and April of each year and at all such other times when the daily quantity delivered shall exceed the average daily quantity delivered during the preceding six (6) months set forth above. The COUNTY shall have the right to make such tests as it shall deem necessary, and at such times as it shall deem to be appropriate, to determine to what extent the maximum 60-minutes sustained demand imposed upon the facilities of the COUNTY by the requirements of the TOWN between the hours of 6:00 A.M. and 9:00 P.M. is exceeding the average daily demand for the same month. For the purpose of making each such test and of ascertaining and utilizing the result to give effect to the provisions of this Paragraph, the COUNTY shall use a recording flow meter installed at each of the points of delivery provided for in Paragraph 4 above. Such tests shall apply to each of the six (6) months set forth above and to any other month in which the average daily demand is equal to or greater than the average daily demand for the six (6) months considered collectively. Provided however, that no test allowed by this paragraph shall occur on less than three (3) business days notice to the TOWN.

20. The TOWN shall establish, impose, maintain and collect, or shall cause to be established, imposed, maintained and collected at all times throughout the effective period such rates and charges for water distributed as will enable it to pay in full all amounts to which the COUNTY shall be entitled.

21. No property taxes shall be levied or collected by the TOWN upon the properties of the Department. Additionally, the TOWN shall not impose any zoning changes upon the properties of the Department.

22. Any cessation of water services and any consequences caused by force majeure, inevitable accident or occurrence or cause beyond the reasonable control of either Party, shall not constitute a breach of this Contract and neither party shall be liable to the other or its inhabitants or customers for any damage resulting from such cessation or interruption of water service. Force majeure shall mean an act of God which includes but is not limited to sudden, unexpected or extraordinary forces of nature such as floods, washouts, storms, fires, earthquakes, landslides, hurricanes, epidemics, explosions or other forces of nature, strikes, lockouts, other industrial disturbances, wars, blockades, acts of terrorism, insurrections, riots, federal, state, county and local governmental restrictions, regulations and restraints, military action, civil disturbances, or conditions in federal, state, county and local permits.

Neither party shall be liable for its failure to carry out its obligations under the contract during a period when such party is rendered unable, in whole or in part, by force majeure or inevitable accidents or occurrences to carry out such obligations, but the obligations of the party or parties relying on such force majeure shall be suspended only during the continuance of any inability so caused and for no longer period of an unexpected or uncontrollable event, and such cause shall, so far as possible, be remedied with all reasonable dispatch. It is further agreed and stipulated that the right of any party to excuse its failure to perform by reason of force majeure shall be conditioned upon such party giving, to the other party, written notice of its assertion that a force majeure delay has commenced within ten (10) working days after such commencement, unless there exists good cause for failure to give such notice, in which event, failure to give such notice shall not prejudice any party's right to justify any non-performance as caused by force majeure unless the failure to give timely notice causes material prejudice to the other party.

23. In accordance with the provision of County Ordinance No. 89-95 as currently in effect and as may be amended or revised in the future, the TOWN shall require all new retail users, as defined in the Ordinance, to pay the COUNTY's water and sewer connection charges. The TOWN shall not render water service, sewer service or both to any new retail user until a written receipt from the Department is provided to the TOWN. Pursuant to Ordinance No. 05-167, the provision of water and/or sewer service to new retail users by the TOWN who did not pay the appropriate charges, shall render the TOWN liable to the COUNTY for the payment of such charges.

24. In consideration of good and valuable consideration received from the COUNTY and in consideration of the covenants in this Contract, the TOWN agrees to indemnify and save harmless forever, the COUNTY, its officers, agents and employees from all claims, liability, actions, loss, cost and expense, including attorney's fees, which may be sustained by the COUNTY, its officers, agents, and employees due to, caused by, or arising from the negligence of the TOWN, its officers, employees and agents in connection with the performance of this Contract. The TOWN agrees to defend against any claims brought or actions filed against the COUNTY, its officers, agents and employees in connection with the subject of the indemnities contained herein.

25. In consideration of good and valuable consideration received from the TOWN and in consideration of the covenants in this Contract, the COUNTY agrees to indemnify and save harmless forever, the TOWN, its officers, agents and employees from all claims, liability, actions, loss, cost and expense, including attorney's fees, which may be sustained by the TOWN, its officers,

agents, and employees due to, caused by, or arising from the negligence of the COUNTY, its officers, employees and agents in connection with the performance of this Contract. The COUNTY agrees to defend against any claims brought or actions filed against the TOWN, its officers, agents and employees in connection with the subject of the indemnities contained herein.

26. Notwithstanding the above, nothing shall create any liability of the COUNTY or TOWN beyond the scope of Section 768.28 Florida Statutes, as currently in effect or as lawfully amended in the future.

27. No rights pursuant to this contract shall be assignable by the TOWN unless the COUNTY agrees in writing.

28. This Contract shall be and remain in full force and effect for a period of twenty (20) years from the date of execution of this Contract providing the SFWMD extends the current Consumptive Use Permits for a twenty (20) year period. The TOWN shall comply with the terms and conditions of the Consumptive Use Permit issued by the SFWMD and any revisions or modifications to such permit. Where the Consumptive Use Permit requires reporting of various measures to the SFWMD, or requires actions be taken to the satisfaction of the SFWMD, the TOWN shall make such reports or take such actions as necessary to comply with the terms of the Permit. The County shall notify the TOWN of any such actions which are necessary and shall allow a reasonable time for compliance by the TOWN.

29. The TOWN grants to the COUNTY the right to provide reuse water for non-drinking purposes, when available, within the TOWN subject to federal, state and local laws and regulations in effect and as may be amended in the future, subject to the issuance of construction permits by the TOWN and upon the TOWN's Manager giving approval in writing which shall not be unreasonably withheld. The TOWN agrees to accept and utilize re-use water in lieu of potable water, if such water is provided by the COUNTY through a distribution system installed in the TOWN at the COUNTY's expense, to the extent the use for which the COUNTY is offering such re-use water is permitted by law.

30. All notices required pursuant to this Contract shall be properly given if mailed by United States registered or certified mail addressed to the party to which notice is to be given at the following respective addresses:

Miami-Dade County
c/o The Director
Miami-Dade Water and Sewer Department
3071 SW 38 Avenue

Town of Surfside
Water Service Contract
04/09/2007

10

TOWN OF SURFSIDE
Mayor
9293 Harding Avenue
Surfside, Florida 33154

31. This contract shall be governed by and construed according to the laws of the State of Florida, and venue shall be in Miami-Dade County, Florida.

32. This Contract contains the entire Contract of the parties with respect to the subject matter and replaces and supersedes all prior contracts or understandings, oral or written, with respect to such subject matter, and such contracts or understandings are now void and no longer in effect.

33. If any Section of this Contract is found to be null and void, the other Sections shall remain in full force and effect.

(THE REST OF THIS PAGE IS INTENTIONALLY LEFT BLANK)

IN WITNESS WHEREOF, the parties have caused this instrument to be executed in their names and their corporate seals affixed and to all duplicates by their respective officers all as of the day and year above.

 Clerk 7/26/07

MIAMI-DADE COUNTY

By: [Signature] (SEAL)
County Mayor

ATTEST:

TOWN OF SURFSIDE

By: [Signature]
Town Clerk

By: [Signature] (SEAL)
Town Manager

Approved as to form and legal sufficiency:

Approved as to form:

[Signature]
Assistant County Attorney

[Signature]
Attorney for Town of Surfside

Town of Surfside
Water Service Contract
04/09/2007

12

Exhibit "A"

ABSOLUTE BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS, That TOWN OF SURFSIDE, a municipal corporation organized and existing under the laws of the State of Florida, hereinafter called GRANTOR, for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, paid and delivered by Miami-Dade County, a political subdivision of the State of Florida, hereinafter called GRANTEE, the receipt whereof is hereby acknowledged, has granted, bargained, sold, transferred and delivered, and by these presents does grant, bargain, sell, transfer and deliver unto the GRANTEE, its successors and assigns, that portion of the GRANTOR's water facilities installed to provide an additional point of connection south of _____ Street and _____ Avenue in Miami-Dade County.

The GRANTOR hereby assigns and transfers to the GRANTEE all of its rights, title and interest to the following:

- a. Any and all rights, licenses and permits from the Department of the Army Corps of Engineers and State of Florida, Department of Environmental Regulation issued to the TOWN in connection with the construction of the sewage facilities.
- b. Any and all other rights, interest, easements, licenses and permits issued or granted by any other governmental authority, person, firm or corporation in connection with the sewage facilities conveyed to the GRANTEE hereunder.

TO HAVE AND TO HOLD the same unto the GRANTEE, its successors and assigns forever. GRANTOR does covenant to and with the GRANTEE, its successors and assigns, that GRANTOR is the lawful owner of the above described; that said property is free from all encumbrances; that GRANTOR has good right to sell the same aforesaid; that GRANTOR will warrant and defend the sale of the said property unto the GRANTEE, its successors and assigns, against the lawful claims and demands of all persons whomsoever.

IN WITNESS WHEREOF, the GRANTOR has hereunto set its hand and seal this _____ day of _____, 2007.

ATTEST:

TOWN Clerk

TOWN OF SURFSIDE

TOWN Manager

CHAPTER 1: FUTURE LAND USE ELEMENT

DATA, INVENTORY AND ANALYSIS

Page 1-5

Potable Water Facilities

The Town of Surfside's potable water is provided by the Miami-Dade County Water and Sewer Department (MDWASD). The water is distributed to residents and commercial business by approximately 11 miles of cast iron pipe installed in 1938. The Town of Surfside is serviced by the Hialeah-Preston Water Treatment Plant service area which includes the northern part of Miami-Dade County. ~~The Hialeah and Preston Water Treatment Plants (WTPs) are currently being modified and will receive ground water from five Upper Floridan Aquifer wells by 2010.~~ A new upper Floridan Aquifer Reverse Osmosis (RO) water treatment plant was constructed in 2013, and is located at 4250 W. 114th Terrace in the City of Hialeah. The WTP was constructed pursuant to a Joint Participation Agreement between the City of Hialeah and the County which was approved by the Board of County Commissioners on July 24, 2007 and called for the design, construction, and operation of a water treatment plant constructed in the annexation area and supplied by the brackish Floridan aquifer to produce initially 10 mgd with the capacity to expand to 17.5 mgd. Approval from the Florida Department of Health to produce and distribute water was received in November 2013. The WTP utilizes the Floridan Aquifer as the alternative water supply using the RO treatment to remove the salt. The initial operational phase of the Plant is 7.5 mgd, increasing to 10 mgd by the end of 2015 when construction of additional wells is expected to be completed. The quantity of water available to serve MDWASD's North District, as reflected in permitted withdrawal allocations, provides more than adequate capacity.

~~The 455-137.2 gallons capita per day (gpcd) value is a MDWASD system wide finished water rate. In 2007 the actual gpcd value for the Town of Surfside was 206 gpcd. The Town of Surfside is aware of this high gpcd value, and is currently working with MDWASD to implement water efficiency plans, public~~

~~education, and BMPs to reduce the Town of Surfside's gpcd value. The Town adopted its most recent 20-year Water Supply Facilities Work Plan in 2008¹⁵.~~

The level of service will be met for Surfside in the short term and long term planning periods.

CHAPTER 4: INFRASTRUCTURE ELEMENT

DATA, INVENTORY AND ANALYSIS

Page 4-1

POTABLE WATER

This section evaluates the potable water system serving the Town of Surfside. ~~Potable water facilities are defined in Rule 9J-5.003, F.A.C. as "a system of inclusive of all structures designed to collect, treat, and distribute potable water in addition to water wells, treatment plants, reservoirs and distribution mains."~~

Miami Dade County Water and Sewer Department Geographic Service Area

The Town of Surfside's potable water is provided by a system operated by the Miami-Dade County Water and Sewer Department (MDWASD) which provides service for approximately ~~two~~ 2.6 million customers in Miami-Dade County. The MDWASD water service area illustrated in Figure ~~2-43.1~~ (Appendix ~~B4-A~~ Miami Dade County Town of Surfside 20-Year Water Supply Facilities Work Plan) is interconnected and functions as a single service area. The Town of Surfside is serviced by the Hialeah-Preston Water Treatment Plant service area which includes the northern part of Miami-Dade County.

The water is distributed to residents and commercial business by approximately 11 miles of cast iron pipe installed in 1938. Primary mains feeding the system run under the Town's streets and vary in size from 6-inch to 16-inches in diameter, which feed three-inch and four-inch water lines located along the rear property lines.

Water Source

~~The Hialeah Preston Water Treatment Plant (WTP) located at 200 W. 2nd Avenue and 1100 W. 2nd Avenue; both plants are interconnected with adjacent facilities with a main source of water from the Biscayne Aquifer. The WTP's are currently being modified and will receive ground water from five Upper Floridan Aquifer wells by 2010. The wells will be located in Miami Springs Wellfield and the Northwest Wellfield according to MDWASD.~~

The source water for the Hialeah Water Treatment Plant (WTP) is from the Hialeah-Miami Springs Wellfields, supplemented by the Northwest Wellfield. There are three active wells located in the Hialeah Wellfield constructed in 1936. Each well is 14 inches in diameter, 115 feet deep and have casing depths of 80 feet. The total wellfield capacity is 12.54 mgd or 8,700 gpm (2,900 gpm for each well). The twenty active wells located in the Miami Springs Wellfield were constructed between 1924 and 1954. These wells are 14 inches and 30 inches in diameter, 80 to 90 feet deep and have casing

depths of 80 feet. The total wellfield capacity is 79.30 mgd or 55,070 gpm (ranging between or 2,500 and 5,000 gpm for each well). The Northwest Wellfield has fifteen active wells that were constructed in 1980. The wells are 40 inches and 48 inches diameter and 80 to 100 feet deep, with casing depths ranging from 46 to 57 feet. These wells have two-speed motors. The total nominal capacity of the wells at the low speed flow rate is 149.35 mgd. The capacity of each well, except well No. 10, is 10 mgd at the low speed flow rate. Well 10 have a low speed capacity of 9.35 mgd. The total nominal capacity for the wells at the high speed flow is 220.94 mgd.

The seven active wells located in the John E. Preston Wellfield were constructed in 1966 and 1972. Each well is 42 inches in diameter, 107 feet deep and have casing depths of 66. The capacity of wells No. 1 through No. 6 is 5,000 gallons per minute (gpm) each and the capacity of well No. 7 is 7,000 gpm. The total wellfield capacity is 53.28 mgd.

Water Treatment Plants (WTPs)

~~The Hialeah and Preston Plants are currently fed by forty five wells, including the Northwest Wellfield and the Hialeah/Preston on-site wells. The quantity of water available to serve MDWASD's North District, as reflected in permitted withdrawal allocations, provides more than adequate capacity.~~

~~The Hialeah WTP was originally designed in 1924 with a total capacity of 10 mgd. By 1935, the plant's capacity was 40 mgd. In 1946, capacity was increased to 60 mgd. There are plans to rerate and upgrade the Hialeah WTP to a capacity of 70 mgd, if necessary. The source of water for the Hialeah WTP comes from the Hialeah-Miami Springs Wellfields, supplemented by the Northwest Wellfield. The Hialeah WTP has a current rated capacity of 60 mgd.~~

~~The John E. Preston Water Treatment Plant was originally designed as a 60 mgd plant in 1968 and upgraded to 110 mgd in 1980. The plant was rerated to a total capacity of 130 mgd in 1984.~~

~~The plant reached its present capacity of 165 mgd and 185mgd in 2005 with the addition of air stripping capacity. The main source of water for the Preston WTP is from the Northwest wellfield.~~

The Hialeah WTP was originally designed in 1924 with a total capacity of 10 mgd. By 1935, the plant's capacity totaled 40 mgd. In 1946, capacity was increased to 60 mgd. Air strippers with a capacity of 84 mgd were added to the treatment process in 1991 to remove volatile organics from the finished water. A 3.2 MG storage reservoir for both the Hialeah and John E. Preston WTPs was also added in 1991. The Hialeah WTP has a current rated capacity of 60 mgd and there are plans to rerate and upgrade the

Hialeah WTP to a capacity of 70 mgd, if necessary. The treatment process for this WTP includes lime softening with sodium silicate activated by chlorine, recarbonation, chlorination, ammoniation, fluoridation, filtration, and air stripping. The plant site is relatively small, and is surrounded by residential areas.

The John E. Preston WTP was originally designed as a 60 mgd plant in 1968 and upgraded to 110 mgd in 1980. The plant was re-rated to a total capacity of 130 mgd in 1984. The plant reached its present capacity of 165 mgd with another addition in 1988. In 1991, the plant was modified with an air stripping capacity of 185 mgd to remove VOCs. In 2005, plant process modifications to provide enhanced softening for reduction of color and total organic carbon came on line. The main source of water for the Preston WTP is from the Northwest Wellfield. The current rated capacity is 165 mgd with a treatment process similar to that of the Hialeah WTP. This includes lime softening with ferric and other coagulant and chemicals added prior to lime for enhanced softening, recarbonation, chlorination, ammoniation, fluoridation, filtration, and air stripping. The Preston plant is also located in a residential area of Hialeah.

Potable Water Level of Service

~~In order to maintain level of service town wide, a water maintenance program will be implemented in 2010. Currently, construction documents are being prepared for a Town wide replacement of the water mains, meters, and fire hydrants. The program will evaluate the existing infrastructure and replace pipes in poor condition and in need repairs.~~

The Town of Surfside currently coordinates with MDWASD and the South Florida Water Management District to meet existing and projected demands based on level of service (LOS). ~~The Town's MDWASD's~~ projected water demands shown in Table 4-1 below were developed by ~~incorporating the County's~~ utilizing an average per capita value of ~~155~~ 137.2 ~~gpcd~~ gpcd gallons per capita per day.

Table 4-1
Water Supply Level of Service
Miami-Dade Water and Sewer Department (WASD) Water Demand Projection

PROJECTED WATER SUPPLY			
Year	2010	2015	2030
Population	5,280	5,483	5,680
Proposed Per Capita (gallons per day finished water)	155	155	155
(all potable volumes are finished water)	MGD	MGD	MGD
Potable Water Demand (daily average)	0.82	0.850	0.88

Source: Calvin, Giordano & Associates, Inc., 2000.

<u>Year</u>	<u>Population</u>	<u>Finished Water Use (gpd)</u>	<u>AADD Finished Water Use (gpd)</u>	<u>Water Conservation Credit (MGD)</u>	<u>Reuse Reclaimed Water Credit</u>	<u>Adjusted Finished Water Demand (MGD)</u>	<u>Adjusted Finished Water Use (gpd)</u>
<u>2014</u>	<u>2,243,879</u>	<u>137.2</u>	<u>307.19</u>	<u>1.3</u>	<u>0.00</u>	<u>306.43</u>	<u>136.56</u>
<u>2015</u>	<u>2,266,092</u>	<u>137.2</u>	<u>310.84</u>	<u>2.0</u>	<u>0.00</u>	<u>308.80</u>	<u>136.27</u>
<u>2020</u>	<u>2,370,769</u>	<u>137.2</u>	<u>325.20</u>	<u>5.4</u>	<u>0.00</u>	<u>319.76</u>	<u>134.88</u>
<u>2025</u>	<u>2,475,446</u>	<u>137.2</u>	<u>339.56</u>	<u>8.8</u>	<u>0.00</u>	<u>330.72</u>	<u>133.60</u>
<u>2030</u>	<u>2,580,123</u>	<u>137.2</u>	<u>353.92</u>	<u>9.5</u>	<u>0.00</u>	<u>344.37</u>	<u>133.47</u>
<u>2031</u>	<u>2,601,058</u>	<u>137.2</u>	<u>356.79</u>	<u>9.5</u>	<u>0.00</u>	<u>347.24</u>	<u>133.50</u>
<u>2032</u>	<u>2,621,994</u>	<u>137.2</u>	<u>359.66</u>	<u>9.5</u>	<u>0.00</u>	<u>350.11</u>	<u>133.53</u>
<u>2033</u>	<u>2,642,929</u>	<u>137.2</u>	<u>362.53</u>	<u>9.5</u>	<u>0.00</u>	<u>352.98</u>	<u>133.56</u>

Source: WASD's 20 year water supply plan (2014-2033)

~~The 155 gallons capita per day (gpcd) value is a MDWASD system wide finished water rate which was calculated from taking historical data. In 2007 the actual gpcd value for the Town of Surfside was 206 gpcd. The Town of Surfside is aware of this high gpcd value, and is currently working with MDWASD to implement water efficiency plans, public education, and BMPs to reduce the Town of Surfside's gpcd value. In addition, the planned replacement of the leaking water valves, mains, fire hydrants, meters and service laterals will reduce the total water consumption.~~

~~Table 5-2 Figure 4.1 in the Miami Dade County Town of Surfside 20-Year Water Supply Facilities Work Plan indicates that there will be no deficit of finished water through 20303. Therefore, level of service will be met for Surfside and throughout the MDWASD utility service area in both the short term and long term planning periods.~~

The existing LOS for the Town of Surfside based on MDWASD goals for potable water is as follows:

The regional treatment system shall operate with a rated maximum daily capacity of no less than 2 percent above the maximum daily flow for the preceding year, and an average daily capacity of 2 percent above the average daily system demand for the preceding 5 years.

- A. Water shall be delivered to users at a pressure no less than 20 pounds per square inch (psi) and no greater than 100 psi.
- B. Water quality shall meet all federal, state, and county primary standards for potable water.
- C. MDWASD storage capacity for finished water shall equal no less than 15 percent of the average daily demand.
- D. The level of service (LOS) standard for potable water facilities shall be ~~455~~ 137.2 gallons per capita per day.

Storage Capacity

The finished water storage facilities for the Hialeah-Preston subarea consist of both "in-plant" and remote storage facilities. The total combined storage capacity between both plants inclusive of remote storage facilities is 28.2856.0 MG. Additional information on MDWASD's ~~capacity improvements~~ finished water storage facility capacities can be found in Table 3.1 of Appendix B4-A (Miami-Dade Town of Surfside 20-Year Water Supply Facilities Work Plan).

Water Supply Facilities Work Plan

The purpose of the Town of Surfside 20-Year Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources, as well as facilities needed to serve the existing and new development within the local government's jurisdiction. Chapter 163, Part II, F.S., requires local governments to prepare and adopt Work Plans into their Comprehensive Plans within 18 months after the water management district approves a regional water supply plan. Surfside adopted their Work Plan in ~~December 2008~~ June 2015. The Work Plan is developed to coordinate with MDWASD's 20-Year Water Supply Facilities Work Plan (2014-2033).

On a regional level, the Town falls within the South Florida Water Management District (SFWMD) and within the SFWMD's Lower East Coast (LEC) Planning Area. The ~~2005-2006~~ 2013 Lower East Coast Water Supply Plan Update (2005-2006 2013 LEC Plan Update), approved by the SFWMD ~~on February 15, 2007~~ in September 2013, is one of ~~four~~ five, long-term comprehensive regional water supply plan updates the ~~District~~ SFWMD has developed for its planning areas. The planning horizon for the ~~2005-2006~~ 2013 LEC Plan Update is ~~2025~~ 2010-2030.

Page 4-6

NATURAL GROUNDWATER AQUIFER RECHARGE

The principal ground water resources for the Lower East Coast (LEC) Planning Area are the Surficial Aquifer System (SAS), including the Biscayne Aquifer, and the Floridan Aquifer System (FAS). The Surficial and Biscayne aquifers provide ~~most of the fresh water for more than 1 billion gallons a day for public water supply and other uses such as agriculture and landscape irrigation~~ within the LEC Planning Area. ~~The 2005-2006 LEC Plan Update identifies the following:~~

Although the Biscayne Aquifer is part of the Surficial Aquifer System (SAS), it exists only along the coastal areas in Miami-Dade, Broward and southern Palm Beach counties. The Biscayne Aquifer is highly productive with high-quality fresh water. The

extension of the SAS through central and northern Palm Beach County is less productive, but is still used for consumptive uses, including potable water. These aquifers are shallow, generally located within 200 feet of ground surface, and are connected to surface water systems, including canals, lakes and wetlands.

The Biscayne Aquifer and the extension of the SAS into northern Palm Beach County provide more than 1 billion gallons per day of high-quality, inexpensive fresh water for the populations of Palm Beach, Broward and Miami-Dade counties and the Florida Keys portion of Monroe County. In 2010, fresh groundwater accounted for 94 percent of potable water produced by public water supply utilities.

This volume is heavily supported, especially during the annual dry season, as well as in periodic droughts, by water from the regional system, primarily the Everglades. During droughts, water from Lake Okeechobee has been required to supplement water from the Everglades to meet the needs of the coastal counties. In 2008, the United States Army Corps of Engineers (USACE) implemented the "2008 Lake Okeechobee Federal Regulation Schedule," lowering the operation levels at the lake to reduce the risk of dike failure and minimize impacts to the lake's ecology. This resulted in a projected decline in the level of certainty for agricultural users to rely on the lake, and increased the expectation that the lake would exceed its minimum flow and levels criteria more frequently. In response, the South Florida Water Management District (SFWMD) adopted regulatory criteria to limit future additional withdrawals from Lake Okeechobee and connected water bodies to protect the lake and prevent further erosion to the level of certainty for existing legal users. The Okeechobee Utility Authority in the Kissimmee Basin Planning Area is the only remaining utility using water directly from Lake Okeechobee. Since the 2005-2006 LEC Plan update, Clewiston, South Bay, Belle Glade, and Pahokee have all discontinued the use of Lake Okeechobee as their supply source and now use Floridan Aquifer System water treated by reverse osmosis.

The Biscayne Aquifer is designated as a sole source aquifer by the U.S. Environmental Protection Agency (USEPA) under the *Safe Drinking Water Act* because it is a principal source of drinking water and is highly susceptible to contamination due to its high permeability and proximity to land surface in many locations. ~~Protection of the Biscayne Aquifer is provided for through the District's *Basis of Review for Water Use Permit Applications* (SFWMD 2003) and in Chapter 373, Florida Statutes (F.S.), which limit the water availability for consumptive uses.~~ As of the 2013 LEC Plan Update, SFWMD has placed limitations on additional allocations from the Biscayne Aquifer. As a result, use of alternative water sources has expanded and a Comprehensive Water Conservation Program has been adopted by SFWMD.

The Floridan Aquifer System (FAS) exists not just in the LEC Planning Area, but throughout the entire state and portions of adjacent states. The Upper Floridan Aquifer

in southeast Florida contains brackish water, and is increasingly being tapped as a source of raw water for treatment with reverse osmosis (RO) to create potable water. Brackish water from the Floridan Aquifer is also blended with fresh water prior to conventional water treatment to expand water supplies during the dry season. Additionally, the Floridan Aquifer is used for seasonal storage of treated fresh water within aquifer storage and recovery (ASR) systems. Until recent years, the Floridan Aquifer has been ~~was~~ more extensively developed in the Upper East Coast (UEC) and Lower West Coast (LWC) planning areas of the South Florida Water Management District (SFWMD or District) than in the LEC Planning Area.

From Jupiter to southern Miami, water from the FAS is highly mineralized and not suitable for drinking water without specialized treatment. More than 600 feet of low permeability sediments confine this aquifer and create artesian conditions in the LEC Planning Area. Although the potentiometric surface of the aquifer is above land surface, the low permeability units of the intermediate confining unit prevent significant upward migration of saline waters into the shallower freshwater aquifers.

The top of the Upper Floridan Aquifer is approximately 900 feet in southeast Florida, and the base of the Upper Floridan extends as deep as 1,500 feet. At the base of the Lower Floridan Aquifer, there are cavernous zones with extremely high transmissives collectively known as the boulder zone. Because of their depth and high salinity, these deeper zones of the Lower Floridan Aquifer are used primarily for disposal of treated wastewater.

The Miami-Dade Water Supply Facilities Work Plan outlines a number of Alternative Water Supply (AWS) and conservation strategies designed to protect water sources and comply with recent regulations limiting withdrawals and allocations and eliminating the use of existing ocean outfalls. ~~recharge aquifers with reclaimed water.~~

CHAPTER 4: INFRASTRUCTURE ELEMENT

GOALS, OBJECTIVES AND POLICIES

Page 4-8

Objective 1 - ~~Correct deficiencies and increase~~ Ensure sufficient capacity of potable water and sanitary sewer facilities:

In general, ~~correct potable water and sanitary sewer system deficiencies and increase~~ ensure sufficient potable water and sanitary sewer system capacity in the most

cost effective manner possible. This objective shall be made measurable by its implementing policies. ~~{0J-5.011 (3) (b) 1, 2 and 3}~~

Policy 1.1 - The Town shall continue use of Miami-Dade County Water and Sewer Authority Department facilities at the Central District Wastewater Treatment Plant on Virginia Key and the Hialeah/Preston Water Treatment Plant or such other Miami-Dade County facilities as may be appropriate.

Policy 1.2 - The Town shall upgrade the potable water distribution system and the sanitary sewer collection system through ongoing maintenance. ~~{0J-5.011 (3) (c) 1}~~

Policy 1.6 - The Town shall maintain a ~~the Surfside~~ 20-Year Water Supply Facilities Work Plan, ~~dated November 26, 2008,~~ and shall ensure coordination between land uses and future water supply planning within 18 months of the adoption of the Lower East Coast Water Supply Plan, or its update, as required by Chapter 163, Florida Statute.

Policy 1.7 - The Town of Surfside 20-Year Water Supply Facilities Work Plan is adopted by reference into the Comprehensive Plan. The Work Plan will be updated, ~~at a minimum every five years,~~ concurrent with the any updates of to the Miami-Dade County 20-Year Water Supply Facilities Work Plan.

Objective 4 – Level of service: Achieve adequate facility capacity to serve existing development and new development concurrent with the impact of that development. Achievement of this objective shall be measured by the implementation of the following policies:

Policy 4.1 – The Town will enforce the following level of service standards:

Potable Water: The County-wide “maximum day flow” of the preceding year shall not exceed 98 percent of the County treatment and storage system's rated capacity. The pressure shall be at least 20 pounds per square inch at the property line. The potable water consumption standard shall be ~~455~~137.2 average gallons per capita per day. ~~{0J-5.011 (2) (c) 2d}~~

Objective 5 - Water conservation: Conserve and protect potable water resources by optimizing the utilization of water resources through effective water management practices. ~~{0J-5.011 (2) (b) 4}~~

Policy 5.1 - The Town shall maintain and improve land development code and other regulations that include: 1) water conservation-based irrigation requirements; 2) water conservation-based plant species requirements derived from the South Florida Water Management District's list of native species and other appropriate sources; 3) lawn watering restrictions; 4) mandatory use of ultra-low volume water saving devices for substantial rehabilitation and new

construction; and 5) other water conservation measures, as feasible. ~~{9J-5.011 (2)(c) 3}~~

Policy 5.2 - The Town shall promote education programs for residential, commercial and other uses which will discourage waste and conserve potable water. ~~{9J-5.011 (2)(c) 3}~~

~~**9J-5.011 Objective and policy requirements not applicable to the Town of Surfside:** Rule 9J-5 of the Florida Administrative Code requires communities to adopt as part of their Infrastructure Element objectives and policies which address various issues, except where these issues are not reasonably applicable to a particular community. The following objective and policy provisions of Rule 9J-5 are deemed by the Town of Surfside to be inapplicable to Surfside:~~

~~9J5.011 (3) (b) 3 Addressing [maximizing the use of existing facilities] and minimizing urban sprawl.~~

~~9J5.011 (3) (b) 5 Addressing the function of natural groundwater recharge areas and natural drainage features.~~

CHAPTER 6: CONSERVATION ELEMENT

GOALS, OBJECTIVES AND POLICIES

Page 6-12

~~Policy 3.7 The Town shall continue to decrease potable water consumption and achieve at a minimum a 5% per capita reduction in water consumption by the year 2011, from the rate of 165 gallons per capita per day documented for 2007 in the Town's 20-year Water Supply Plan.~~

CHAPTER 8: INTERGOVERNMENTAL COORDINATION

DATA, INVENTORY AND ANALYSIS

Page 8-2

Florida Departments and Agencies

~~Community Affairs, Division of Community Planning
Department of Economic Opportunity~~

Page 8-3

Infrastructure

The Town of Surfside purchases its water directly from the Miami-Dade County Water and Sewer Department (WASD). The Town's Water Supply Facilities Work Plan was adopted in ~~December 2008~~ June 2015 and coordinated with the Miami-Dade County Water and Sewer Department 20-Year Water Supply Facilities Work Plan (2014-2033) and the South Florida Water Management District's 2013 Lower East Coast Water Supply Plan. Further coordination with the Florida Department of Environmental Protection (DEP) will be important to ensure stormwater quality and impacts on the Biscayne Bay.

Page 8-7

Florida Departments and Agencies

Agency	Subject Coordination	Nature of Relations	Existing and Anticipated Coordination Mechanisms	Effectiveness of Existing Coordination Mechanisms	Surfside Office with Primary Responsibility for Coordination
Community Affairs, Division of Community Planning <u>Department of Economic Opportunity</u>	Comprehensive planning	AP, TA	Oversight of Comprehensive Plan, EAR, Regulation of Land Development Code	Effective	Planning

CHAPTER 9: CAPITAL IMPROVEMENTS ELEMENT**DATA, INVENTORY AND ANALYSIS**

Page 9-2

POTABLE WATER

The Town of Surfside's potable water is provided by the Miami-Dade County Water and Sewer Department (MDWASD) which provides service for approximately ~~two~~ 2.6 million customers in Miami Dade County. The Town of Surfside is serviced by the Hialeah-

Preston Water Treatment Plant service area which includes the northern part of Miami-Dade County.

The water is distributed to residents and commercial business by approximately 11 miles of cast iron pipe installed in 1938. Primary mains feeding the system run under the Town's streets and vary in size from 6 inch to 16-inches in diameter, which feed three-inch and four-inch water lines located along the rear property lines.

Water Source

~~The Hialeah and Preston Water Treatment Plants (WTPs) located at 200 W. 2nd Avenue and 1100 W. 2nd Avenue are interconnected with adjacent facilities with a main source of water from the Biscayne Aquifer. The WTPs are currently being modified and will receive groundwater from five Upper Floridan Aquifer wells by 2010. The wells will be located in Miami Springs Wellfield and the Northwest Wellfield according to MDWASD.~~

The source water for the Hialeah Water Treatment Plant (WTP) is from the Hialeah-Miami Springs Wellfields, supplemented by the Northwest Wellfield. There are three active wells located in the Hialeah Wellfield constructed in 1936. Each well is 14 inches in diameter, 115 feet deep and have casing depths of 80 feet. The total wellfield capacity is 12.54 mgd or 8,700 gpm (2,900 gpm for each well). The twenty active wells located in the Miami Springs Wellfield were constructed between 1924 and 1954. These wells are 14 inches and 30 inches in diameter, 80 to 90 feet deep and have casing depths of 80 feet. The total wellfield capacity is 79.30 mgd or 55,070 gpm (ranging between or 2,500 and 5,000 gpm for each well). The Northwest Wellfield has fifteen active wells that were constructed in 1980. The wells are 40 inches and 48 inches diameter and 80 to 100 feet deep, with casing depths ranging from 46 to 57 feet. These wells have two-speed motors. The total nominal capacity of the wells at the low speed flow rate is 149.35 mgd. The capacity of each well, except well No. 10, is 10 mgd at the low speed flow rate. Well 10 have a low speed capacity of 9.35 mgd. The total nominal capacity for the wells at the high speed flow is 220.94 mgd.

The seven active wells located in the John E. Preston Wellfield were constructed in 1966 and 1972. Each well is 42 inches in diameter, 107 feet deep and have casing depths of 66. The capacity of wells No. 1 through No. 6 is 5,000 gallons per minute (gpm) each and the capacity of well No. 7 is 7,000 gpm. The total wellfield capacity is 53.28 mgd.

Water Treatment Plants (WTPs)

~~The Hialeah and Preston Plants are currently fed by forty five wells, including the Northwest Wellfield and the Hialeah/Preston on-site wells. The quantity of water available to serve MDWASD's North District, as reflected in permitted withdrawal allocations, provides more than adequate capacity.~~

~~The Hialeah WTP was originally designed in 1924 with a total capacity of 10 mgd. By 1935, the plant's capacity was 40 mgd. In 1946, capacity was increased to 60 mgd. There are plans to re-rate and upgrade the Hialeah WTP to a capacity of 70 mgd, if necessary. The source of water for the Hialeah WTP comes from the Hialeah Miami Springs Wellfields, supplemented by the Northwest Wellfield. The Hialeah WTP has a current rated capacity of 60 mgd.~~

~~The John E. Preston Water Treatment Plant was originally designed as a 60 mgd plant in 1968 and upgraded to 110 mgd in 1980. The plant was re-rated to a total capacity of 130 mgd in 1984. The plant reached its present capacity of 165 mgd and 185 mgd in 2005 with the addition of air stripping capacity. The main source of water for the Preston WTP is from the Northwest wellfield.~~

The Hialeah WTP was originally designed in 1924 with a total capacity of 10 mgd. By 1935, the plant's capacity totaled 40 mgd. In 1946, capacity was increased to 60 mgd. Air strippers with a capacity of 84 mgd were added to the treatment process in 1991 to remove volatile organics from the finished water. A 3.2 MG storage reservoir for both the Hialeah and John E. Preston WTPs was also added in 1991. The Hialeah WTP has a current rated capacity of 60 mgd and there are plans to re-rate and upgrade the Hialeah WTP to a capacity of 70 mgd, if necessary. The treatment process for this WTP includes lime softening with sodium silicate activated by chlorine, recarbonation, chlorination, ammoniation, fluoridation, filtration, and air stripping. The plant site is relatively small, and is surrounded by residential areas.

The John E. Preston WTP was originally designed as a 60 mgd plant in 1968 and upgraded to 110 mgd in 1980. The plant was re-rated to a total capacity of 130 mgd in 1984. The plant reached its present capacity of 165 mgd with another addition in 1988. In 1991, the plant was modified with an air stripping capacity of 185 mgd to remove VOCs. In 2005, plant process modifications to provide enhanced softening for reduction of color and total organic carbon came on line. The main source of water for the Preston WTP is from the Northwest Wellfield. The current rated capacity is 165 mgd with a treatment process similar to that of the Hialeah WTP. This includes lime softening with ferric and other coagulant and chemicals added prior to lime for enhanced softening, recarbonation, chlorination, ammoniation, fluoridation, filtration, and air stripping. The Preston plant is also located in a residential area of Hialeah.

Potable Water Level of Service

In order to maintain level of service Town-wide, a water maintenance program will be implemented in 2010. Currently, construction documents are being prepared for a Town-wide replacement of the water mains, meters, and fire hydrants. The program will evaluate the existing infrastructure and replace pipes in poor condition and in need of repairs. The project and funding source is listed in Table 9-8B of the Schedule of Capital Improvements.

The Town of Surfside currently coordinates with MDWASD and the South Florida Water Management District to meet existing and projected demands based on level of service (LOS). The Town's MDWASD's projected water demands shown in Table 9-1 below were developed by incorporating utilizing the eCounty's average per capita value of 455137.2 gpcd gallons per capita per day.

**Table 9-1
Water Supply Level of Service
Miami-Dade Water and Sewer Department (WASD) Water Demand Projection**

PROJECTED WATER SUPPLY			
Year	2010	2015	2030
Population	5,280	5,483	5,680
Proposed Per Capita (gallons per day finished water)	155	155	155
(all potable volumes are finished water)	MGD	MGD	MGD
Potable Water Demand (daily average)	0.82	0.85	0.88

Source: Calvin, Giordano & Associates, Inc., 2009.

Year	Population	Finished Water Use (gpd)	AADD Finished Water Use (gpd)	Water Conservation Credit (MGD)	Reuse Reclaimed Water Credit	Adjusted Finished Water Demand (MGD)	Adjusted Finished Water Use (gpd)
2014	2,243,879	137.2	307.19	1.3	0.00	306.43	136.56
2015	2,266,092	137.2	310.84	2.0	0.00	308.80	136.27
2020	2,370,769	137.2	325.20	5.4	0.00	319.76	134.88
2025	2,475,446	137.2	339.56	8.8	0.00	330.72	133.60
2030	2,580,123	137.2	353.92	9.5	0.00	344.37	133.47
2031	2,601,058	137.2	356.79	9.5	0.00	347.24	133.50
2032	2,621,994	137.2	359.66	9.5	0.00	350.11	133.53
2033	2,642,929	137.2	362.53	9.5	0.00	352.98	133.56

Source: WASD's 20 year water supply plan (2014-2033)

The ~~455~~137.2 gallons per capita per day (gpcd) value is a MDWASD system-wide finished water rate which was calculated ~~from taking historical data~~ by taking a 3-year average of water demand from 2011 to 2013. In ~~2007 the actual gpcd value for the Town of Surfside was 206 gpcd~~. The Town of Surfside is aware of this higher gpcd value, and is currently working with MDWASD to implement water efficiency plans, public education, and BMPs to reduce the Town of Surfside's gpcd value. In addition, the planned replacement of the leaking water valves, mains, fire hydrants, meters and service laterals will reduce the total water consumption.

~~Table 5-2~~Figure 4.1 in the Town of Surfside 20-Year Water Supply Facilities Work Plan indicates that there will be no deficit of finished water through ~~2030~~2033. Therefore, level of service will be met for Surfside in the short term and long term planning periods.

The existing LOS for the Town of Surfside based on MDWASD goals for potable water is as follows:

- A. The regional treatment system shall operate with a rated maximum daily capacity of no less than 2 percent above the maximum daily flow for the preceding year, and an average daily capacity of 2 percent above the average daily system demand for the preceding 5 years.
- B. Water shall be delivered to users at a pressure no less than 20 pounds per square inch (psi) and no greater than 100 psi.
- C. Water quality shall meet all federal, state, and county primary standards for potable water.
- D. MDWASD storage capacity for finished water shall equal no less than 15 percent of the average daily demand.
- E. The level of service (LOS) standard for potable water facilities shall be ~~455~~137.2 gallons per capita per day.

Storage Capacity

The finished water storage facilities for the Hialeah-Preston subarea consist of both "in-plant" and remote storage facilities. The total combined storage capacity between both plants inclusive of remote storage facilities is ~~28~~2856.0 MG.

CHAPTER 9: CAPITAL IMPROVEMENTS ELEMENT

GOALS, OBJECTIVES AND POLICIES

Page 9-13

The Town shall incorporate by reference the potable water projects for the ~~FY10-14~~ FY12-13 period in the Miami-Dade 20-Year Water Supply Facilities Work Plan (2014-2033) ~~adopted on April 24, 2008~~ November 2014.

Page 9-14

Objective 2 – In general, the ~~coordination of~~ coordinate land use decisions and available or projected fiscal resources, with a schedule of capital improvements which maintains adopted level of service standards and meets existing and future facility needs. In particular, achieve coordinated Town use of: 1) existing and already approved development; 2) the Future Land Use Plan; 3) the financial analyses in this Element, and 4) the established Level of Service Standards in both reviewing development applications and in preparing the annual schedule of capital improvements.

Policy 2.1 – The following Level of Service (LOS) standards shall be maintained:

Potable Water. The County-wide “maximum day flow” of the preceding year shall not exceed 98 percent of the County treatment and storage system’s rated capacity. The pressure shall be at least 20 pounds per square inch at the property line. The potable water consumption standard shall be ~~455~~137.2 average gallons per capita per day.

Table 9-B Town Wastewater and Potable Water Projects

Project Name	Location	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	Total
Wastewater System Rehabilitation Program	Townwide	1,145,000	1,145,000	725,000	20,000	20,000	3,055,000
Water System Program	Townwide	1,428,000	285,600	285,600	285,600	285,600	2,570,400
Total Cost of Projects		2,573,000	1,430,600	1,010,600	305,600	305,600	5,625,400
Funding Sources	Water and Sewer Fund-Balance	1,533,328	1,910,593	2,159,126	2,245,491	2,335,311	10,183,849
	General Fund	210,672					
	General Obligation Bond	829,000					829,000
Total Funding Available for Stormwater Pollution Control Project		2,362,328	1,910,593	2,159,126	2,245,491	2,335,311	11,012,849
Balance		0	479,993	1,148,526	1,939,891	2,029,711	5,387,449



Town of Surfside Planning and Zoning Board Communication

Agenda Date: February 26, 2015

Subject: Residential Sheds

From: Sarah Sinatra Gould, AICP, Town Planner

Background: The zoning code limits sheds to 70 square feet and requires Planning and Zoning Board approval. Staff was approached in June of 2013 by a resident wanting a shed larger than the code limited square footage. Staff prepared a memo and potential code change to increase the size of a shed to 100 square feet and allow sheds to be approved administratively, if they were not located on a street side of the lot.

The Planning and Zoning Board discussed this proposal and agreed that the Board was not interested in sheds larger than 70 square feet, and even discussed requiring shorter sheds, while accommodating the same cubic area as the 70 square foot permitted sheds. Staff attempted to research these types of sheds, but they were not the standard shed and the code modification was not pursued.

Staff has been approached by a different resident requesting a shed larger than 70 square feet and has asked for this topic to be placed on the agenda for the Board's discussion.

Staff is suggesting the following language:

90-54.7 A ~~total~~ shed, the area of which does not exceed ~~70~~ 100 square feet and the height of which does not exceed 10 feet, shall be permitted in a rear yard and shall either provide landscaping at the foundation of the structure or within the property to minimize the appearance of the shed from neighboring properties. – A shed is subject to the following minimum setbacks:

- (a) Rear: Five feet.*
- (b) Side and secondary frontage (corner): Per zoning designation.*



Town of Surfside Planning and Zoning Board Communication

Agenda Date: February 26, 2015

Subject: Practical Difficulty Variance Standards

From: Sarah Sinatra Gould, AICP, Town Planner

Background: Charlie Ness, a town resident, requested an addition at their existing single family home. The Town code limits lot coverage to 40% and Mr. Ness requested to exceed the lot coverage limits. Lot coverage is defined as *the percentage of the total area of a lot that, when viewed from above, would be covered by all principal and accessory buildings and structures, or portions thereof; provided however that allowable exclusions, as described under "floor area," shall not be included in determining the building area.*

The exclusions to lot coverage mean that they will not count towards the 40% maximum. The exclusions are as follows:

- a. Basement space when used for parking of vehicles, as provided in the design standards for underground parking in this Code.
- b. Accessory water tanks or cooling towers.
- c. Uncovered steps and exterior balconies.
- d. Interior balconies. The width of an interior balcony shall not be greater than the depth.
- e. Covered or uncovered terraces, patios, breezeways, or porches which are open on two (2) sides.

It should be noted that although the exclusions above do not count towards the maximum 40% lot coverage, they will count towards a property's maximum impervious area, which is 65%. Meaning, that 35% of a lot must remain "green."

Mr. Ness spoke at the September 9, 2014 Town Commission meeting under the Good and Welfare portion of the agenda and asked the Town Commission to change the code to increase lot coverage of single family homes from 40% to 47.5% to enable him to build his addition. The Commission directed Staff to place this request on the Planning and Zoning Board's agenda for discussion.

This was reviewed by the Planning and Zoning Board at the September 30, 2014 meeting. The board directed staff to return with language that accommodated this request, but provided parameters and graphics to explain the code provision.

At the October 14, 2014 Town Commission meeting, the Commission directed staff to consider the option of prohibiting an expansion of the second story if a homeowner takes advantage of a maximum lot coverage of 50% on the first story.

This was further discussed at the December 9, 2014 Town Commission meeting. The Town Commission directed staff to revisit this topic by offering a method whereby the Town Commission could approve a lot coverage request on a case by case basis. Staff explained that the existing variance provisions in the code require an applicant to demonstrate an unnecessary or undue hardship. In the case of Mr. Ness, he would not be able to demonstrate this hardship.

Analysis: Staff reviewed other municipalities codes and found that some jurisdictions have multiple variance standards which differentiate between an unnecessary hardship and a "practical difficulty." In the case of a variance, a practical difficulty is a standard which is similar to but less rigorous than the unnecessary and undue hardship standard. This was discussed at the January Planning and Zoning Board meeting and the board recommended adding requirements on landscaping. Staff recommends the following language.

(1) *Purpose, definition, scope and limitations.*

- a. Unnecessary and undue hardship variance. An unnecessary and undue hardship variance is a relaxation of the terms or provisions of the Zoning Code of the Town of Surfside (zoning code) where such action will not be contrary to the public interest and where, owing to conditions peculiar to the property and not the result of actions of the applicant, a literal enforcement of the zoning code would result in unnecessary and undue hardship on the property. As used in this section, a variance is authorized only for lot coverage, dimensions of yards, setbacks, other open spaces, building spacing, parking, or loading requirements.
- b. Practical difficulty variance. A practical difficulty variance is a relaxation of the terms or provisions of the Zoning Code which is less rigorous than the unnecessary and undue hardship standard. Practical difficulty variances shall only be applicable to lot coverage for single family homes located on single platted lots in the H30B zoning district. The standard provides for a variance where a literal enforcement of a zoning regulation will create a practical difficulty in the use of the parcel of land for the purpose or in the manner for which it is zoned, considering various factors set forth in paragraph (9) below.

(2). *Uses and height of structures not subject to variance.* A variance is authorized only as set out in subsection

- a. Under no circumstances shall the town commission grant a variance that would allow a use of property that is not allowed within the zoning district under the Town of Surfside Comprehensive Plan and the zoning code.
- b. Under no circumstances shall the town commission grant a variance that would allow height of development and structures within the Town of Surfside that exceeds the maximum building heights that are set out in the Town of Surfside Comprehensive Plan or the zoning code, whichever provisions are more restrictive.

(3) *Nonconforming uses and structures not grounds for granting variance.* Nonconforming use of neighboring lands, structures, or buildings in the same zoning district, and permitted use of lands, structures or buildings in any other district, shall not be considered grounds for granting a variance.

(4) *Town manager not authorized to vary terms of section.* The town manager or designee has no authority to relax the terms of this section. Authority to grant variances is lodged solely with the town commission.

(5) *Application requirements.* An application for a general variance shall be filed by the owner of the property upon which the variance is requested or the owners designated representative. The following shall, at minimum, be required to support a variance application:

- a. Statements of ownership and control of the property, executed and sworn to by the owner or owners of 100 percent of the property described in the application, or by tenant or tenants with the owners' written, sworn consent,

or by duly authorized agents evidenced by a written power of attorney if the agent is not a member of the Florida Bar.

b. The written consent of all utilities and/or easement holders if the proposed work encroaches into any easements.

c. Survey less than one year old (including owner's affidavit that no changes have occurred since the date of the survey). A survey over one year is sufficient as long as the property has not changed ownership and the owner provides an affidavit that no changes change occurred since the date of the survey.

d. Site plan indicating the existing and proposed structures.

e. A map indicating the general location of the property.

(6) *Staff review.* The town manager or designee shall review the application to determine whether the proposed variance complies with the general purpose and standards set forth herein. The town manager or designee shall compile a written staff report summarizing the facts regarding the application, including all relevant documents. The complete staff report shall be transmitted to the planning and zoning board and to the town commission.

(7) *Review by planning and zoning board and by the town commission.* The town manager or designee shall schedule the general variance application for a meeting of the planning and zoning board. The planning and zoning board shall conduct one public hearing on the general variance application, review the application, and make recommendations to the town commission for final action. The town manager or designee shall then schedule the variance application, including the recommendation of the planning and zoning board, for a meeting of the town commission.

a. *Public hearing.* The town commission shall hold one public hearing on the variance application.

b. *Action by the town commission.* In considering whether to approve or deny the application, the town commission shall review the application, the purposes and standards set forth in this section, the staff report, the recommendation of the planning and zoning board, and relevant evidence, including oral and written comments received at the public hearing. No variance shall be granted except upon the affirmative vote of at least four members of the town commission.

(8) Standards of review for an unnecessary and undue hardship variance. The town commission shall approve an unnecessary and undue hardship variance only if the variance applicant demonstrates by clear and convincing evidence that all of the following are met and satisfied:

a. Special conditions and circumstances exist which are peculiar to the land, structure, or building involved, and which are not applicable to other lands, structures, or buildings in the same zoning district;

b. The special conditions and circumstances do not result from the actions of the applicant or a prior owner of the property;

- c. Literal interpretation of the provisions of the zoning code deprives the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the zoning code and results in unnecessary and undue hardship on the applicant;
- d. The hardship has not been deliberately or knowingly created or suffered to establish a use or structure which is not otherwise consistent with the town comprehensive plan or the zoning code;
- e. An applicant's desire or ability to achieve greater financial return or maximum financial return from his property does not constitute hardship;
- f. Granting the variance application conveys the same treatment to the applicant as to the owner of other lands, buildings, or structures in the same zoning district;
- g. The requested variance is the minimum variance that makes possible the reasonable use of the land, building, or structure; and
- h. The requested variance is in harmony with the general intent and purpose of the town comprehensive plan and the zoning code, is not injurious to the neighborhood or otherwise detrimental to the public safety and welfare, is compatible with the neighborhood, and will not substantially diminish or impair property values within the neighborhood.

(9) Standards of review for a practical difficulty variance. The town commission shall approve a practical difficulty variance if it finds, based on substantial competent evidence, that following factors demonstrate that a practical difficulty exists:

- a. How substantial the variance is in relation to the requirement sought to be varied;
- b. Whether a substantial change will be produced in the character of the neighborhood;
- c. Whether the difficulty can be obviated by some method feasible for the applicant to pursue other than by a variance; and
- d. Whether, in view of the manner in which the difficulty arose, the interest of justice will be served by allowing the variance.

(9) (10) Conditions and restrictions. The town commission may impose such conditions and restrictions upon the premises benefited by any variance as may be necessary to comply with the standards set out in this Section, and to prevent or minimize adverse effects on other property in the neighborhood. Violation of such conditions and restrictions, when made a part of the terms under which any variance is granted, shall be deemed a violation of the zoning code, and shall constitute grounds for revocation of the variance.

- a. A condition of granting a practical difficulty variance shall be for the property to meet or exceed the landscape requirements in Chapter 90, Article VIII of the Town's Code of Ordinances.

~~(10)~~(11) *Expiration of approval.* The approval of any variance shall be void if the applicant does not obtain a building permit or other development order to implement the variance within 24 months after the granting of the variance. An applicant who has obtained approval of a variance may request an extension of this time period within the original approval period. The town commission may grant one or more extensions for a period of up to a total of six months for good cause shown by the applicant.

~~(11)~~ (12) *Amendments and alterations to approved variances.* Any expansion to an approved variance and any addition to or expansion of an existing variance shall require the same application, review, and approval as required under this Section for the original variance.



Town of Surfside Planning and Zoning Board Communication

Agenda Date: February 26, 2015

Subject: Interior Balconies

From: Sarah Sinatra Gould, AICP, Town Planner

Background: The Planning and Zoning Board has expressed concerns over the ability for an interior balcony to be counted towards the requirement for an average setback. Staff is recommending the following underlined language to clarify the definition of exclusions to floor area.

Sec. 90-2. – Definitions

Floor area: The sum of the gross horizontal areas of the several floors of a building or buildings, measured from the exterior faces of exterior walls or from the centerline of walls separating two attached buildings. Basement space used for retailing shall be included for the purposes of calculating requirements for accessory off-street parking spaces and accessory off-street loading berths.

(1) In particular, floor area including (but not limited to):

- a. Elevator shafts or stairwells at each floor.*
- b. Floor space used for mechanical equipment.*
- c. Floor space in penthouses.*
- d. Attic floor space (whether or not a floor has been laid) providing structural headroom of seven feet six inches or more.*
- e. Floor space in interior balconies or interior mezzanines.*
- f. Floor space in porches and pools enclosed with plastic, glass or permanent type of material.*
- g. Any floor space used for residential use, no matter where located within the building.*
- h. Garages (attached and unattached), sheds and accessory buildings.*

(2) However, the floor area of a building shall not include:

- a. Basement space when used for parking of vehicles, as provided in the design standards for underground parking in this Code.*
- b. Accessory water tanks or cooling towers.*
- c. Uncovered steps and exterior balconies.*
- d. Interior balconies. The width of an interior balcony shall not be greater than the depth. An interior balcony shall not be utilized to meet an average setback requirement*
- e. Covered or uncovered terraces, patios, breezeways, or porches which are open on two (2) sides.*

ITEM	OUTCOME	NEXT STEPS	IN CONTRACT OR WORK AUTHORIZATION	TENTATIVE SCHEDULE	COMPLETE
FUTURE PZ DISCUSSION ITEMS					
Landscaping in front of converted garage	Determine if landscaping planter is sufficient versus requiring landscaping.	Reviewed code and determined that planter is only permitted in cases where the driveway would be too short.	In contract	No further modification necessary	Yes
Tree Canopy Initiative	\$8,000 budgeted in the FY 2014-2015 budget		Contract with separate provider	Town Administration to follow up	
Average side setback	Modify ordinance for additional side setbacks on upper floors for single family homes	Draft code amendment	In contract	February PZ	On agenda as discussion item in March
Sheds	Modify ordinance to increase square footage, but reduce height and add landscape requirements.	Draft code amendment	In contract	February PZ	On agenda as discussion item in March
Measuring height from crown of the road	Place on agenda for discussion relating to sea level rise	Direction from Planning and Zoning		May PZ	
Parking space standards	Modify multi-family rates based on number of bedrooms and provide for guest parking, look at other cities (Coral Gables), require parking for hotel employees, no change to size of spaces, pumps in underground garages	Draft code amendment	In contract	June PZ	
Cargo container regulations	Prohibit cargo containers in the business district	Draft code amendment	In contract	June PZ	
Satellite dishes	Further review by staff	Research and	In contract	June PZ	

		prepare report for discussion and possible code amendment				
Residential or commercial wind turbine regulations	Prepare ordinance regulating wind turbines including hurricane precautions, noise regulations, insurance considerations	Draft code amendment	In contract	June PZ		
Green walls	Require green walls adjacent to alleys and other buildings that about public right of ways	Research and prepare report for discussion and possible code amendment	In contract	June PZ		
Final Zoning Inspections	Town Manager will analyze					
Corridor Analysis	Study corridor between Collins & Harding	Prepare code amendments	Work authorization to be approved in NOVEMBER	JANUARY PZ		In progress
ON UPCOMING COMMISSION AGENDA						
Single Family Paint Colors	Discussion with the Planning & Zoning Board to determine if a color palette is appropriate for single family homes and what colors/criteria should be included	Place on future Planning and Zoning agenda for discussion	In contract	March PZ		Must be brought back to PZ for further discussion
ON FUTURE COMMISSION AGENDA						
Commercial waste and recycling container screening	Screening for containers, green screen, vegetation, include pictures from Commissioner Kligman	Draft code amendment	In contract	March PZ		Waiting placement on Commission Agenda
Driveway material regulations	Modify code to allow stamped concrete and concrete slabs with decorative rock or grass in between	Draft code amendment	In contract	November PZ		Waiting Placement on Commission Agenda

Painting of commercial structures	Town Staff to prepare ordinance	Prepare ordinance for commission	Building to prepare ordinance	March PZ	Upcoming Commission agenda.
COMPLETED					
Parking Trust Fund	Discussion with the Planning & Zoning Board to provide a cap for payment into the fund	Ordinance on July PZ agenda	In contract	July Commission for 1 st reading, July PZ August Commission for 2 nd reading	Complete
Turtle Lighting	Town Staff to prepare review	No ordinance necessary. Turtle lighting already required in code.	COMPLETE	Turtle Lighting	Town Staff to prepare review
Downtown Color Palette	Discussion with the Planning & Zoning Board to determine if a color palette is appropriate and what colors/criteria should be included	Place on future Planning and Zoning agenda for discussion	In contract	Replaced with repainting of structures.	Complete
Bay Drive & 96 th Street	Open Bay Drive off 96 th Street	Staff will research	Police and Building to research	No change. Police Chief cited safety concerns	COMPLETE
Sign/awning code	Discussed at Joint Meeting	Staff beginning to work on draft	Work Authorization approved	July Commission August Commission	COMPLETE
As-built reviews for residential projects	Discuss increasing canopy in town; street trees, what can be planted in ROW	Research and prepare report for discussion and possible code amendment	In contract	March PZ	COMPLETE Added a program modification to FY2015 budget
Interpretation of base flood elevation for the H120 district	No change	No further action needed		N/A	COMPLETE

Solar panel regulations	Prepare ordinance regulating solar panels	Draft code amendment	In contract	March PZ	COMPLETE
Car charging station regulations	Prepare ordinance regulating car charging stations requiring them in new multi-family, research what other communities are doing	Draft code amendment	In contract	December PZ	COMPLETE
Pyramiding effects of stepbacks in the H120 district	No action necessary since Planning and Zoning Board currently reviewing stepbacks as part of wall frontage modifications			N/A	
Garage door clarification	Modify code to remove requirement for two separate garage doors	Draft code amendment	In contract	November PZ	COMPLETE
10% window opening requirement per story	Discussion with the Planning & Zoning Board	Prepare ordinance for commission	In contract	June PZ	November Commission for first reading



MEMORANDUM

To: Planning and Zoning Board
From: Peter Glynn
Date: March 26, 2015
Re: New Catchword for PZ – PROACTIVE

How do you place a value on the nature of a community?

I am very concerned that developers or new homebuyers will tear down our older houses and build these big blocky flat roof houses.

This will change the very nature of our community. We just saw what happens when a developer buys 3 lots and attempts to put 3 of these houses next to each other. We have also seen many of these build on 88th street.

I am picturing new buyers tearing down the existing houses on the 50' lots and placing these VISUALLY huge houses between 2 of our typical surfside houses.

IT'S NOT A PRETTY PICTURE

They could pass right through the code as it is written now but still take all the air out of the neighbor's yards.

I would like to push this up to the front of the list right next to the Harding Collins corridor.

Surfside has a great tax base with all the 5 star hotels and condos that are being built on east side of Collins. I don't believe surfside needs to grow any larger. I also don't want to see surfside slowly but surely change in nature.

I would like to discuss this and see if other board members agree with me.