PROFESSIONAL SERVICES CONTRACT BETWEEN
THE CITY OF HUNTINGTON BEACH AND
MICHAEL BAKER INTERNATIONAL INC

MICHAEL BAKER INTERNATIONAL, INC.

FOR

A COMPREHENSIVE LOCAL COASTAL PROGRAM UPDATE

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and MICHAEL BAKER INTERNATIONAL, INC., a Pennsylvania Corporation hereinafter referred to as "CONSULTANT."

WHEREAS, CITY desires to engage the services of a consultant to prepare a Comprehensive Local Coastal Program Update; and

Pursuant to documentation on file in the office of the City Clerk, the provisions of the Huntington Beach Municipal Code, Chapter 3.03, relating to procurement of professional service contracts have been complied with; and

CONSULTANT has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

1. SCOPE OF SERVICES

CONSULTANT shall provide all services as described in **Exhibit** "A," which is attached hereto and incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the "PROJECT."

CONSULTANT hereby designates Richard Beck who shall represent it and be its sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. <u>CITY STAFF ASSISTANCE</u>

CITY shall assign a staff coordinator to work directly with CONSULTANT in the performance of this Agreement.

3. TERM; TIME OF PERFORMANCE

Time is of the essence of this Agreement. The services of CONSULTANT are to commence on ________, 20_____ (the "Commencement Date"). This Agreement shall automatically terminate three (3) years from the Commencement Date, unless extended or sooner terminated as provided herein. All tasks specified in Exhibit "A" shall be completed no later than March 15, 2022. The time for performance of the tasks identified in Exhibit "A" are generally to be shown in Exhibit "A." This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONSULTANT.

In the event the Commencement Date precedes the Effective Date, CONSULTANT shall be bound by all terms and conditions as provided herein.

4. COMPENSATION

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed Two Hundred and Forty Thousand Dollars (\$240,000).

5, EXTRA WORK

In the event CITY requires additional services not included in Exhibit "A" or changes in the scope of services described in Exhibit "A," CONSULTANT will undertake such work only after receiving written authorization from CITY. Additional compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

METHOD OF PAYMENT

CONSULTANT shall be paid pursuant to the terms of Exhibit "B."

7. DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS

CONSULTANT agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONSULTANT shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

8. HOLD HARMLESS

A. CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONSULTANT's (or CONSULTANT's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONSULTANT, its officers, agents or employees except such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONSULTANT will conduct all defense at its sole cost and expense and CITY shall approve selection of CONSULTANT's counsel. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONSULTANT.

B. To the extent that CONSULTANT performs "Design Professional Services" within the meaning of Civil Code Section 2782.8, then the following Hold Harmless provision applies in place of subsection A above:

"CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY and its officers, elected or appointed officials, employees, agents and volunteers, from and against any and all claims, damages, losses, expenses, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) to the extent that the claims against CONSULTANT arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONSULTANT. In no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault. However, notwithstanding the previous sentence, in the event one or more other defendants to the claims and/or litigation is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, CONSULTANT shall meet and confer with CITY and other defendants regarding unpaid defense costs. The duty to indemnify, including the duty and the cost to defend, is limited as provided in California Civil Code Section 2782.8.

C. Regardless of whether subparagraph A or B applies, CITY shall be reimbursed by CONSULTANT for all costs and attorney's fees incurred by CITY in enforcing this obligation. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT.

9. PROFESSIONAL LIABILITY INSURANCE

CONSULTANT shall obtain and furnish to CITY a professional liability insurance policy covering the work performed by it hereunder. This policy shall provide coverage for CONSULTANT's professional liability in an amount not less than One Million Dollars (\$1,000,000.00) per occurrence and in the aggregate. The above-mentioned insurance shall not contain a self-insured retention without the express written consent of CITY; however an insurance

policy "deductible" of Ten Thousand Dollars (\$10,000.00) or less is permitted. A claims-made policy shall be acceptable if the policy further provides that:

- A. The policy retroactive date coincides with or precedes the initiation of the scope of work (including subsequent policies purchased as renewals or replacements).
- B. CONSULTANT shall notify CITY of circumstances or incidents that might give rise to future claims.

CONSULTANT will make every effort to maintain similar insurance during the required extended period of coverage following PROJECT completion. If insurance is terminated for any reason, CONSULTANT agrees to purchase an extended reporting provision of at least two (2) years to report claims arising from work performed in connection with this Agreement.

If CONSULTANT fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the CITY with required proof that insurance has been procured and is in force and paid for, the CITY shall have the right, at the CITY's election, to forthwith terminate this Agreement. Such termination shall not effect Consultant's right to be paid for its time and materials expended prior to notification of termination. CONSULTANT waives the right to receive compensation and agrees to indemnify the CITY for any work performed prior to approval of insurance by the CITY.

10. CERTIFICATE OF INSURANCE

Prior to commencing performance of the work hereunder, CONSULTANT shall furnish to CITY a certificate of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverage as required by this Agreement; the certificate shall:

- A. provide the name and policy number of each carrier and policy;
- B. state that the policy is currently in force; and

C. shall promise that such policy shall not be suspended, voided or canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice; however, ten (10) days' prior written notice in the event of cancellation for nonpayment of premium.

CONSULTANT shall maintain the foregoing insurance coverage in force until the work under this Agreement is fully completed and accepted by CITY.

The requirement for carrying the foregoing insurance coverage shall not derogate from CONSULTANT's defense, hold harmless and indemnification obligations as set forth in this Agreement. CITY or its representative shall at all times have the right to demand the original or a copy of the policy of insurance. CONSULTANT shall pay, in a prompt and timely manner, the premiums on the insurance hereinabove required.

11. INDEPENDENT CONTRACTOR

CONSULTANT is, and shall be, acting at all times in the performance of this Agreement as an independent contractor herein and not as an employee of CITY. CONSULTANT shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for CONSULTANT and its officers, agents and employees and all business licenses, if any, in connection with the PROJECT and/or the services to be performed hereunder.

12. TERMINATION OF AGREEMENT

All work required hereunder shall be performed in a good and workmanlike manner. CITY may terminate CONSULTANT's services hereunder at any time with or without cause, and whether or not the PROJECT is fully complete. Any termination of this Agreement by CITY shall be made in writing, notice of which shall be delivered to CONSULTANT as provided herein. In the

event of termination, all finished and unfinished documents, exhibits, report, and evidence shall, at the option of CITY, become its property and shall be promptly delivered to it by CONSULTANT.

13. ASSIGNMENT AND DELEGATION

This Agreement is a personal service contract and the work hereunder shall not be assigned, delegated or subcontracted by CONSULTANT to any other person or entity without the prior express written consent of CITY. If an assignment, delegation or subcontract is approved, all approved assignees, delegates and subconsultants must satisfy the insurance requirements as set forth in Sections 9 and 10 hereinabove.

14. COPYRIGHTS/PATENTS

CITY shall own all rights to any patent or copyright on any work, item or material produced as a result of this Agreement.

15. CITY EMPLOYEES AND OFFICIALS

CONSULTANT shall employ no CITY official nor any regular CITY employee in the work performed pursuant to this Agreement. No officer or employee of CITY shall have any financial interest in this Agreement in violation of the applicable provisions of the California Government Code.

16. NOTICES

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONSULTANT's agent (as designated in Section 1 hereinabove) or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONSULTANT may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

TO CITY:

TO CONSULTANT:

City of Huntington Beach ATTN: Ricky Ramos 2000 Main Street Huntington Beach, CA 92648 Richard Beck
5 Hutton Centre, Suite 500
Santa Ana, CA 92707
(949) 855-3687
rbeck@mbakerintl.com

17. CONSENT

When CITY's consent/approval is required under this Agreement, its consent/approval for one transaction or event shall not be deemed to be a consent/approval to any subsequent occurrence of the same or any other transaction or event.

18. <u>MODIFICATION</u>

No waiver or modification of any language in this Agreement shall be valid unless in writing and duly executed by both parties.

19. SECTION HEADINGS

The titles, captions, section, paragraph and subject headings, and descriptive phrases at the beginning of the various sections in this Agreement are merely descriptive and are included solely for convenience of reference only and are not representative of matters included or excluded from such provisions, and do not interpret, define, limit or describe, or construe the intent of the parties or affect the construction or interpretation of any provision of this Agreement.

20. INTERPRETATION OF THIS AGREEMENT

The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against any of the parties. If any provision of this Agreement is held by an arbitrator or court of competent jurisdiction to be unenforceable, void, illegal or invalid, such holding shall not invalidate or affect the remaining covenants and provisions of this Agreement. No covenant or provision shall be deemed dependent upon any other unless so expressly provided here. As used in this Agreement, the masculine or 20-8602/228654

neuter gender and singular or plural number shall be deemed to include the other whenever the context so indicates or requires. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provision contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no right to contract, then the latter shall prevail, and the provision of this Agreement which is hereby affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

21. DUPLICATE ORIGINAL

The original of this Agreement and one or more copies hereto have been prepared and signed in counterparts as duplicate originals, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original. Each duplicate original shall be deemed an original instrument as against any party who has signed it.

22. IMMIGRATION

CONSULTANT shall be responsible for full compliance with the immigration and naturalization laws of the United States and shall, in particular, comply with the provisions of the United States Code regarding employment verification.

23. <u>LEGAL SERVICES SUBCONTRACTING PROHIBITED</u>

CONSULTANT and CITY agree that CITY is not liable for payment of any subcontractor work involving legal services, and that such legal services are expressly outside the scope of services contemplated hereunder. CONSULTANT understands that pursuant to *Huntington Beach City Charter* Section 309, the City Attorney is the exclusive legal counsel for CITY; and CITY shall not be liable for payment of any legal services expenses incurred by CONSULTANT.

24. <u>ATTORNEY'S FEES</u>

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the nonprevailing party.

25. SURVIVAL

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

26. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

27. SIGNATORIES

Each undersigned represents and warrants that its signature hereinbelow has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify CITY fully for any injuries or damages to CITY in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

28. ENTIRETY

The parties acknowledge and agree that they are entering into this Agreement freely and voluntarily following extensive arm's length negotiation, and that each has had the opportunity to consult with legal counsel prior to executing this Agreement. The parties also acknowledge and agree that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by that party or anyone acting on that party's behalf, which are not embodied in this Agreement, and that that party has not executed this Agreement in reliance on any representation, inducement, promise, agreement, warranty, fact or circumstance not expressly set forth in this

Agreement. This Agreement, and the attached exhibits, contain the entire agreement between the parties respecting the subject matter of this Agreement, and supersede all prior understandings and agreements whether oral or in writing between the parties respecting the subject matter hereof.

29. <u>EFFECTIVE DATE</u>

This Agreement shall be effective on the date of its approval by the City Council.

This Agreement shall expire when terminated as provided herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers.

CONSULTANT,	CITY OF HUNTINGTON BEACH, a
MICHAEL BAKER INTERNATIONAL, INC.	municipal corporation of the State of California
By: Richard Beck, Vice President print name	Mayor
ITS: (circle one) Chairman/President/Vice President	City Clerk
By: Milel 1 lan	INITIATED AND APPROVED:
Michael Tylman, Assistant Secretary print name 5/11/25 ITS: (circle one) Secretary/Chief Financial Officer/Asst.	Director of Community Development
Secretary - Treasurer	REVIEWED AND APPROVED:
	City Manager
	APPROVED AS TO FORM:
	City Attorney

EXHIBIT "A"

A. <u>STATEMENT OF WORK:</u> (Narrative of work to be performed)

Michael Baker International, Inc. will prepare a Comprehensive Local Coastal Program Update.

The scope of work dated March 13, 2020 is attached.

B. CONSULTANT'S DUTIES AND RESPONSIBILITIES:

See attached scope of work.

C. <u>CITY'S DUTIES AND RESPONSIBILITIES:</u>

See attached scope of work.

D. WORK PROGRAM/PROJECT SCHEDULE:

See attached scope of work.

EXHIBIT "B"

Payment Schedule (Hourly Payment)

A. Hourly Rate

CONSULTANT'S fees for such services shall be based upon the following hourly rate and cost schedule:

B. Travel Charges for time during travel are not reimbursable.

C. Billing

- 1. All billing shall be done <u>monthly</u> in fifteen (15) minute increments and matched to an appropriate breakdown of the time that was taken to perform that work and who performed it.
- 2. Each month's bill should include a total to date. That total should provide, at a glance, the total fees and costs incurred to date for the project.
- 3. A copy of memoranda, letters, reports, calculations and other documentation prepared by CONSULTANT may be required to be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.
- 4. CONSULTANT shall submit to CITY an invoice for each monthly payment due. Such invoice shall:
 - A) Reference this Agreement;
 - B) Describe the services performed;
 - C) Show the total amount of the payment due;
 - D) Include a certification by a principal member of CONSULTANT's firm that the work has been performed in accordance with the provisions of this Agreement; and
 - E) For all payments include an estimate of the percentage of work completed.

Upon submission of any such invoice, if CITY is satisfied that CONSULTANT is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONSULTANT in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONSULTANT is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

5. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.

PROFESSIONAL SERVICES CONTRACT BETWEEN THE CITY OF HUNTINGTON BEACH AND MICHAEL BAKER INTERNATIONAL, INC. FOR

A COMPREHENSIVE LOCAL COASTAL PROGRAM UPDATE

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EXHIBIT A



PROPOSAL

Huntington Beach Comprehensive Local Coastal Program Update

March 13, 2020

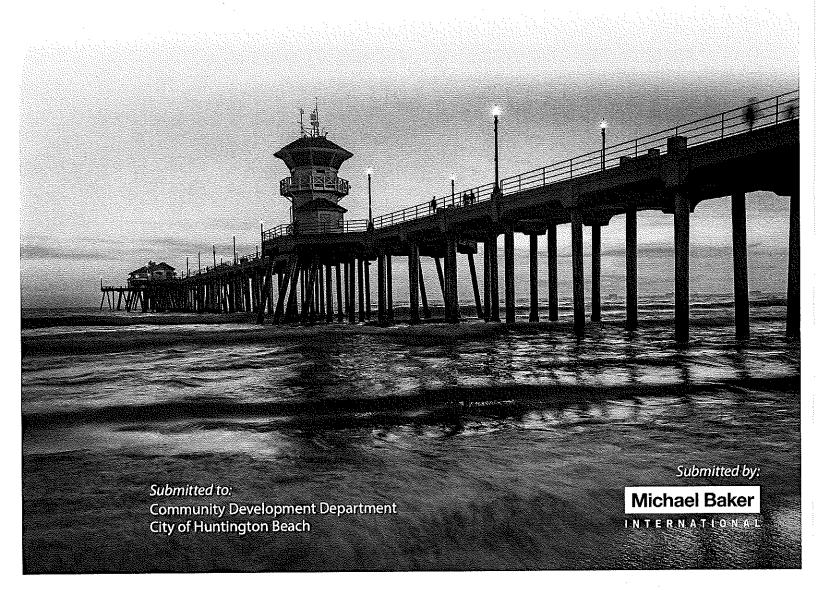






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^{*} Per the RFP, Table of Contents, tables, charts, and graphic exhibits are not included in the page count.

^{**}Per the Q&A on Planet Bids - Appendix A is not included in the page count.



PROPOSAL Huntington Beach Comprehensive A Local Coastal Program Update



Vendor Application Form

VENDOR APPLICATION FORM		
TYPE OF APPLICANT:	□ NEW	CURRENT VENDOR
Legal Contractual Name of Corpor	ation:	Michael Baker International, Inc.
Contact Person for Agreement: Ric	chard Beck	
Corporate Mailing Address:		Centre, Suite 500
City, State and Zip Code:	Santa Ana	ı, CA 92707
E-Mail Address: rbeck@mbak	erintl.com	
Phone: (949) 855-3687		Fax: (949) 837-4122
Contact Person for Proposals: Ric	hard Beck	(
Title: Vice President		E-Mail Address: rbeck@mbakerintl.com
Business Telephone: (949) 855	5-3687	Business Fax: (949) 837-4122
Is your business: (check one) NON PROFIT CORPORATI Is your business: (check one) CORPORATION INDIVIDUAL PARTNERSHIP	LIMITI	FOR PROFIT CORPORATION ED LIABILITY PARTNERSHIP PROPRIETORSHIP CORPORATED ASSOCIATION

1 of 2







Vendor Application Form

Names & Titles of Corporate Board Members (Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names	Title	Phone
Brian A. Lutes	President & CEO	(412) 269-6453
Daniel Kieny	EVP & Chief Technology Officer	(412) 918-4063
David Boone	EVP & Chief Growth Officer	(571) 357-6030
Edward B. Gentilcore	EVP & Chief Legal Officer & Secretary	(412) 918-4060
Richard B. Beck	VP & Practice Executive; Planning & GIS	(949) 855-3687

Federal Tax Identification Number:

25-1228638

City of Huntington Beach Business License Number:

A296516, SIC: 8478

(If none, you must obtain a Huntington Beach Business License upon award of contract.)

5/31/20

City of Huntington Beach Business License Expiration Date:



2 of 2

2



EXHIBIT A



We Make a Difference

March 13, 2020

City of Huntington Beach

Attention: Jennifer Anderson 2000 Main Street | Huntington Beach, CA 92648

Subject: Proposal for Huntington Beach Comprehensive Local Coastal Program Update

Dear Ms. Anderson and Selection Committee:

Congratulations on obtaining your coastal grant for Sea Level Rise (SLR) studies! The City of Huntington Beach (City) has taken a proactive role in researching and tracking sea level rise and coastal policies. Several years ago our team provided a significant amount of coastal analysis that allowed the City to get a jump start on the evolving topic of sea level rise. We are prepared and excited to support the City with relevant updates, policies and solutions so proper planning can be underway for the future.

Michael Baker International (Michael Baker) is proud to submit our qualifications and proven work program to the City. Michael Baker is a recognized leader in planning, environmental, and municipal services on the leading edge of climate change and sustainability planning. We are also excited to again team with our hand-picked subconsultant, Moffatt & Nichol (M&N), who will provide important updates to SLR studies. We have successfully teamed with M&N on over 25 projects – our team provides an unmatched continuity of service to the City.

We know and prepared the City's 2014 sea level rise documentation that exists today. Although still applicable, significant changes have occurred since the publication of the documents. Refinements have included additional detail to coastal mapping modeling programs, newer guidance on policy planning from the California Coastal Commission and an increasingly educated public regarding climate change and sea level rise. Our team is eager to share our "learnings" and proactive tools from years of performing such services, most recently in the City of Seal Beach and Carlsbad. For Huntington Beach, our approach includes the use of existing information where possible (avoid "recreating the wheel"), providing educational updates through clear and concise graphics to be used in stakeholder/City Council engagement, and leveraging our trusted relationships with California Coastal Commission staff to expedite their review and approvals. The table below highlights our approach, project examples, and specific benefits to the City for this work effort:

Approach	Michael Baker Team Feature	Past Project with Successful Approach	Benefits to the City
	Same team of experts to		Consistency of work, higher quality product, meet scheduling objectives.

5 Hutton Centre Drive, Suite 500 | Santa Ana, CA 92707 Office: (949) 472-3505 | Fax: (949) 472-8373 Ms. Jennifer Anderson March 13, 2020 Page 2

Approach	Michael Baker Team Feature	Past Project with Successful Approach	Benefits to the City
Clear and Concise Graphics for Presentations/ Outreach	GIS/graphic capabilities	City of Seal Beach SLR/LCP Update Public Workshops (completed surveys, events at car shows, other unique outreach opportunities)	Increased stakeholder buy-in, reduced gridlock during educational and comment periods.
Leverage Existing CCC Relationships	Constant communication; pre-annotated outline submittals to map CCC staff preferences	City of Hermosa Beach CCC Staff communications	Faster CCC review times, decrease in "re-dos", ultimate approval of documentation.

Our local resources include experts in coastal engineering and marine science, coastal resiliency planning, FEMA, outreach and communication and various technical experts. Advantages brought by Michael Baker include:

- Michael Baker's leadership team includes Richard Beck, as Principal-In-Charge, and Chris Johnson, Project Manager. Mr. Beck and Mr. Johnson have worked together for 20 years, including numerous coastal programs similar to the subject solicitation. This management team experience allows for on-schedule delivery and trusted advisory services, which increases City Council and stakeholder buy-in.
- Michael Baker has provided coastal planning, impact analysis and permitting since the 1970's. We are
 intimately familiar with the California Coastal Act and maintain excellent relationships with the Coastal
 Commission and Coastal Staff. This familiarity adds value to the City in terms of relationships and efficiencies
 tied to budget and schedule.
- We know Huntington Beach! Our team has provided successful local professional planning, engineering, and
 construction services to Huntington Beach and throughout the County for decades. Our past studies allow us
 to eliminate the learning curve with respect to the spectacular City coastline, assets, and resources.
- Our SLR analysis will be conducted by M&N. We have provided seamless projects specific to SLR, which
 reduces the transition time between mapping, risk assessment and creation of policy.

Michael Baker's nearest office to Huntington Beach, California is our Santa Ana office at 5 Hutton Centre, Suite 500, Santa Ana, CA 92707. The office telephone number is (949) 472-3505. Michael Baker will be managing the project out of our Santa Ana office.

The attached scope and fee have been developed to respond to the Coastal Commission grant funding amount of \$200,000 and confirmation from RFP responses concerning available funding.

We can begin work immediately and begin to update existing documents. We look forward to continuing our work effort with the City of Huntington Beach on this project. We have prepared our proposal and compensation details that will be valid for a 180-day period from the date of this submittal. If you have any questions, please contact Richard Beck at (949) 855-3687 or rebeck@mbakerintl.com.

Sincerely,

Richard Beck, PWS, CEP, CPESC, CERP

Vice President

Richard Back





B. Background and Project Summary

BACKGROUND

The City of Huntington Beach, located within the heart of Orange County, is home to approximately 9.5-miles of coastline. Incorporated in 1909, the City is surrounded by the cities of Seal Beach, Westminster, Fountain Valley, Costa Mesa, and Newport Beach, along with County of Orange jurisdiction. State Route 1 traverses the city in a north-south direction, while the Interstate 405 is mostly located north of City jurisdiction. Due to the unique geography and topology of Huntington Beach, the City jurisdiction includes several unique coastal features and resources such as Bolsa Chica Ecological Reserve, Huntington Beach Wetlands, Huntington Harbor, Huntington Beach Pier, and a variety of local and state beaches. As a result, the Huntington Beach Coastal Zone extends from the mean high tide line to generally 1,000 yards inland to over one mile inland in some area locations. The Coastal Zone encompasses approximately five square miles of land and water or approximately 17 percent of the total City area.

Several channels within the City remain under County jurisdiction, such as Talbert Channel, Huntington Beach Channel, East Garden Wintersburg Channel, and more. Additionally, the City is immediately adjacent to the Seal Beach Naval Weapons Station – National Wildlife Refuge to the north and the Santa Ana River to the south. Resources within neighboring jurisdictions could potentially affect Huntington Beach in the case of sea level rise or other coastal hazards.

The City is seeking an amendment to existing Local Coastal Program Documents, which include an update to the Coastal Resiliency Plan, Coastal Element and Floodplain Ordinance. All updates shall be made in accordance with the most recent California Coastal Commission (CCC) guidance and regulations.

PROJECT SUMMARY

Like many municipalities statewide, the Huntington Beach coastal planning documents are not entirely consistent with today's planning challenges. The City has identified the future need to address coastal hazards, sea level rise and adaptation strategies to properly manage future development within the Coastal Zone. Based on the City's existing LCP documents, this work effort will seek to amend and update the City's Coastal Resiliency Plan, Coastal Element and Floodplain Ordinance. It is imperative that the City's coastal planning documents are up to date and useful, to guide City staff and residents on existing land use, land re-use, improvement projects, and tourism.

The City prepared a Sea Level Rise Vulnerability Assessment in 2014, prior to the release of the CCC Sea Level Rise Policy Document (2014) and the Best Available Science Update (2018). Additionally, during the 2017 General Plan Update, the City prepared a Coastal Resiliency Plan (CRP) that identifies strategies and implementation measures associated with sea level rise issues. It is our understanding that the CRP serves as a "bridge document" to link the General Plan with the comprehensive LCP update proposed here. Both documents shall be updated with the most recent policy guidance and direction provided by the CCC, and shall be used to inform the Coastal Element update and Floodplain Ordinance.

It is Michael Baker's understanding that the Coastal Element serves as the City's Land Use Plan (LUP) and will also direct users to appropriate implementation measures (i.e., specific ordinances within the City code). Michael Baker will also identify the specific ordinances that may warrant updates based on the Coastal Element update. Additionally, the Floodplain Ordinance shall be updated based on information gathered throughout the comprehensive LCP amendment process. Specific tasks and processes are outlined in Section C, Methodology.







B. Background and Project Summary

POTENTIAL ISSUES AND PROPOSED SOLUTIONS

Potential Issues	Proposed Solutions
Variety of resources and unique coastline.	Michael Baker is familiar with the City's coastline and adjoining areas given our previous work within the City and other coastal Orange County cities. Our multi-disciplinary team also has the capacity to understand flooding issues with inland waters and predict certain problem areas where surface waters meet the coastline. We are able to use this inhouse knowledge and add value to the City's Coastal Element and Floodplain Ordinance to strengthen consistency and usability.
Local Hazard Mitigation Plan Integration.	Proper integration with the Michael Baker prepared Local Hazard Mitigation Plan shall ensure the City's eligibility for federal disaster assistance. Sea level rise and other coastal related hazards (coastal bluff erosion, flooding, tsunami, and severe weather) were identified as hazards of concern. Michael Baker's top priority shall be to integrate LCP efforts with existing City mechanisms and programs, to ensure streamlined planning and reduced redundancy.
Consideration of various options.	Michael Baker is familiar with managing coastal hazards such as shoreline protection, the elevation of structures and activity areas, resilient design, and retreat.
Legal and political sensitivities.	Michael Baker is familiar with legal and political sensitives associated with sea level rise and coastal adaptation.







Michael Baker has developed an integrated approach in preparing LCPs, while providing flexibility to respond to Huntington Beach's specific needs. This approach is intended to be an informative process that allows the project team, agency officials, stakeholders, and the public to understand issues and potential vulnerabilities in the community. Our history of supporting local agencies with LCPs and SLR vulnerability assessments is strengthened by our experience in hazard mitigation, adaptation and emergency response planning.

Project Management and Project Controls

Michael Baker's project management approach is designed to facilitate clear communication among key parties and to resolve issues in a timely manner. Our management structure, which includes a dedicated Project Manager (Chris Johnson), will facilitate the integration of project activities into a seamless process. While each task has its own set of deliverables and review cycles, the interdependency of all tasks must be recognized to develop a critical path that achieves an adoptable plan within the desired time frame. The Project Manager's role will be to coordinate the project directly with the City Project Manager, support the City staff with community outreach and presentation to the Planning Commission and City Council, and be fully aware of day-to-day project activities. Michael Baker has a unique approach to ensure that each client need is met and that the City's project schedule would be a top priority for Team staff. Our approach is designed to allow for regular interaction between City staff and the Michael Baker Team, which allows for frequent information sharing opportunities. During peak periods of activity, Michael Baker proposes to engage the City in regularly scheduled meetings and/or conference calls. This approach will assist in data exchange without loss of time or resources and will give City staff advance input on issues or questions that may arise.

We have completed several grant funded projects, including Local Coastal Program updates. Michael Baker's scheduling systems allocate resources to meet all client due dates, regardless of timing or number of deadlines within a given period. Responsibility for planning and controlling a contract schedule lies with the Project Manager, who will use all of the following systems: weekly workload management meetings; long-range staffing projections; resource scheduling (Word processing, graphics, editing, production); and, critical path method and timeline scheduling for tasks and milestones.

Quality Assurance/Quality Control

Michael Baker Quality Control Program is a continuous process used not just at project milestones, but also on a daily basis as workflows from desk to desk, discipline to discipline, and consultant to client. Michael Baker utilized this QA/QC program on each project undertaken to ensure that a high-quality product is delivered on schedule and within budget. Michael Baker's key organizational elements for QA/QC are adaptable to any project. Our plans will undergo two types of internal reviews:

- On-going Reviews: These occur throughout the project process by the Principal-in-Charge/Project Manager and focus
 on the day-to-day accuracy and coordination with other disciplines.
- Formal Reviews: These occur at the end of the product submittal stages and will be performed by the discipline department head.

In addition to internal checks, we will provide City staff with a review and comment on all deliverables prior to any release. This will help ensure there is no disconnect between our work and the needs of the City.

Integration Plan

Michael Baker's approach to assisting the City of Huntington Beach is to work in close cooperation as a seamless extension of your staff. Our Team brings extensive experience, but we are cognizant of our role and the need to prepare a Coastal Element and Floodplain Ordinance in line with the overall goals of the community. Michael Baker's coastal







planning efforts produce streamlined plans that are compliant with CCC requirements and guidance, as well as serve as a framework for successful integration with other City planning efforts that lead to effective implementation.

As an extension of City staff, the Michael Baker planning team recognizes the importance of soliciting and documenting the views of internal and external stakeholders, for the benefit of the Vulnerability Assessment (VA), Coastal Resiliency Plan (CRP), Coastal Element and Floodplain Ordinance. All public meetings and outreach events will be staffed with community engagement specialists, familiar with navigating facilitation scenarios related to coastal planning and SLR hazards. The Michael Baker methodology for documenting community input include: detailed meeting minutes, pictures, interactive activities with deliverable results, and outreach summary documents.

Honoring the obligation to meet CCC requirements and guidelines, the Michael Baker Team understands the continued maintenance and resource burdens required to develop a certified LCP. The Michael Baker Team includes members who are experience in reviewing, analyzing, and extracting pre-existing data/information, as well as introducing new streamlined and integrated planning processes to match current resources to reduce staff burdens now and in the future. Michael Baker believes that effective leadership and project management is instrumental for project success, as it provides a framework to guide participants toward common goals, enhances cost effectiveness, and reduces the risk of project budget overruns.

PROPOSED APPROACH AND SCOPE OF WORK

The proposed approach and work program is based on our local knowledge of the City of Huntington Beach, existing relationships with stakeholders and our experience in processing SLR analysis and Local Coastal Plan updates. We look forward to finalizing our scope of work upon the formal negotiation process.

Task 1 | Project Launch

Task 1.1 Project Kick-off Meeting

Michael Baker will schedule an in-person meeting with City staff to confirm project timeline and refine scope items. This meeting will also address any project expectations and relevant information regarding the Comprehensive LCP Update. Up to three (3) Michael Baker staff members will attend the meeting.

Task 1.3 Staff Coordination with Consultant to Track Project Process

Michael Baker will schedule regular conference calls to facilitate effective and ongoing communication amongst the team. These conference calls can be supplemented with in-person meetings, as necessary.

Task 1.4 Invoicing & Quarterly Reporting

Per CCC grant administration procedures, Michael Baker will assist the City in submitting quarterly reports tracking milestone progress and completion. Once per quarter, Michael Baker shall provide an electronic summary document to the City for review. The City will retain responsibility for submittal to CCC.

Task 2 | Sea Level Rise Vulnerability Assessment Update

Task 2.1 Background Data Collection Update

The Michael Baker team has original documents, maps and model results from the 2014 VA to provide a starting point for the update. The probabilistic SLR projections from the Ocean Protection Council (OPC) guidance document will form the basis for scenarios to be evaluated in the VA update. The "likely range" of projections is in the 1- to 3-foot range this

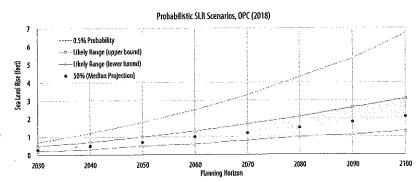


Huntington Beach Comprehensive IT A **Local Coastal Program Update**



C. Methodology

century, but there is potential long-term SLR could reach 5-6 feet. Michael Baker will also download updated coastal hazard information Modeling System Coastal Storm (CoSMoS) Version 3.0, Phase 2, a multiagency effort led by the United States Geological Survey (USGS) that provides storm and non-storm flooding hazards for a range of SLR scenarios, consistent with the updated CCC and OPC guidance documents.



Coastal Conditions Assessment Task 2.2

Many details requested in this task were documented in the recent FEMA California Coastal Analysis and Mapping Project (2016) to update the coastal flooding hazard maps along the Pacific Coast. Rather than perform additional duplicative analysis, we propose to rely on this data for parameters such as beach slope, backshore toe elevation and crest elevation. The Michael Baker team will perform input data spot checks to confirm consistency with other reliable data sources. Regarding long-term historic shoreline change, we will rely on a 2018 feasibility study focused on the Huntington Beach Bluffs (M&N, 2018) prepared by M&N for the Department of Public Works. This study evaluated shoreline change trends at the bluffs and relied on data from the Coast of California Storm and Tidal Wave Study - South Coast Region, Orange County (USACE, 2002) and more recent monitoring data collected by the USACE.

Planning Area Inventory Update Task 2.3

Michael Baker will work with the City to update/expand the GIS inventory of coastal resources assembled as part of the 2014 VA. The updated resource inventory will be grouped into categories to be evaluated in the updated VA. Resource categories depend upon available GIS data, but may include: Coastal Development, Beaches & Public Trust Resources, Coastal Access, Recreation Facilities, Infrastructure, Environmental Resources, or similar.

Task 2.4 **Outreach Prior to Modeling**

Michael Baker will schedule a regular monthly conference call meetings with CCC staff to review the data and methodology that will be applied in the SLR modeling and VA. A maximum of six (6) meetings will be scheduled, to the benefit of providing CCC with project updates and keeping the consultant team on schedule and for grant deliverable requirements.

Model SLR Scenarios Task 2.5

Michael Baker will coordinate with the City and CCC to identify a range of SLR scenarios to evaluate in the updated VA, consistent with CCC /OPC guidance and projections. We propose to evaluate a maximum of five (5) scenarios ranging from 0 (current sea level) to 6.6 feet. Based on a preliminary review, coastal hazard modeling results from CoSMoS provide detailed information on coastal erosion and flooding hazards in Huntington Beach. The USGS approach is consistent with the approach applied in the 2014 VA, except the CoSMoS data analyzed transects at a higher resolution resulting in more accurate depictions of coastal flooding potential for the

updated VA. An example of the CoSMoS hazards for an annual storm event with 0.8 feet of SLR is provided in this figure at Huntington Harbor. CoSMoS modeling results for a range of storm events and SLR scenarios is available at the Our Coast Our Future viewing platform: http://data.pointblue.org/apps/ocof/cms/index.php?page=flood-map.

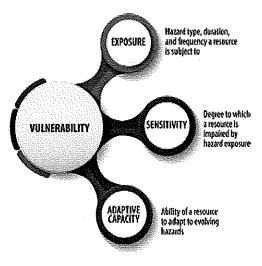






Task 2.6 Conduct Updated SLR Vulnerability Assessment

The updated SLR VA will be prepared to inform policy and adaptation strategy for incorporation into an LCP update. The vulnerabilities and consequences identified in the VA will help prioritize planning efforts to account for the time horizon of each impact, as well as the significance impacts on the community and resources. Consistent with the methodology described in the guidance documents, vulnerability will be evaluated as a function of: 1) hazard exposure, 2) hazard sensitivity, and 3) adaptive capacity, as illustrated on the graphic to the right. Exposure to coastal processes, such as shoreline erosion, storm related flooding, and bluff erosion will be rated based on the type of hazard, duration, and frequency of storm-related or non-storm impacts. Sensitivity and adaptive capacity will be evaluated in conjunction with the project team to identify critical thresholds where hazard exposure could result in damage or functional impairment of a



resource or asset. VA results will inform preparation of the adaptation strategies by identifying thresholds at which significant planning areas, assets, or coastal resources could be impacted by SLR.

Michael Baker will develop an administrative draft SLR Vulnerability Assessment (SLR VA) for City Screencheck Review. The draft SLR VA will be provided to the City via electronic submittal. One round of review and revisions from the City is assumed. Michael Baker will incorporate revisions into a public review draft SLR Vulnerability Assessment. The public review draft will be provided to the City electronically, and the City will be responsible for noticing the 30-day public review period and circulating to interested parties (including the CCC). All comments shall be directed to the City and collected for incorporation.

Task 2.7 Study Approach Summary

A study approach summary and analysis methods will be provided for incorporation into the VA for reference by other jurisdictions, stakeholders and resource agencies. The methodology applied in assessing vulnerability and prioritizing adaptation strategies will provide a great example for other municipalities looking to address SLR hazards in conformance with the latest SLR guidance documents.

Task 3 | Coastal Resiliency Plan Update

Task 3.1 Review Current Plan, Existing Studies, and Adaptation Policies

Michael Baker will review the existing CRP, as well as other existing studies and other existing adaptation measures as applicable. The City will provide necessary background materials electronically, to facilitate desktop review. Michael Baker will also review CCC guidance documentation, including the 2015 SLR Policy Guidance Document, the 2018 Best Available Science Update to SLR Policy Guidance, and the 2018 OPC State SLR Guidance Document.

Task 3.2 Conduct a Public Outreach Process

Community engagement is a major component of the LCP process, and Michael Baker will work with the City to develop an Engagement Strategy that is responsive to participation needs. The approach is anticipated to include a community survey, web-based participation, and outreach meetings as outlined below. All outreach activities shall be thoroughly documented with sign-in sheets, summaries and pictures, as appropriate.







Online Community Survey

Working with the City, Michael Baker will develop an online survey, compile results, and provide a summary of input. The survey is proposed to be provided through SurveyMonkey®, and will include multiple-choice questions, ranking/rating scales, and open-ended questions. Questions will focus on SLR and other coastal hazard for use in CRP and Coastal Element updates. Michael Baker will coordinate with the City to make the survey link available on the City website. The City will be responsible for distributing and promoting the survey.

Web Content/Social Media

Online outreach will be a key strategy in the planning process, providing a cost-effective means for reaching interested members of the public. Michael Baker will assist the City in developing web content that can be used on the City's website or on a webpage that is specifically dedicated to the CRP.

Community Workshop and Pop-Up Activities

Michael Baker will facilitate and attend up to one (1) workshop or pop-up activity focused on the impact of SLR and other coastal hazards. We will work with the City to determine the best location, approach, purpose and content of the outreach event. Michael Baker embraces a whole community approach to ensure stakeholders have several opportunities to participate. Workshops are a fantastic opportunity to inform and obtain input from the community. Additionally, community events or focused outreach as part of regularly scheduled meetings can provide access to input from individuals who do not traditionally participate. Depending on the preference of the City, Michael Baker would support either type of outreach. The City is responsible for securing the ultimate venue and communicating background and purpose to the public for the Comprehensive LCP update. Michael Baker and M&N will attend both meetings and facilitate/present project specific details. Michael Baker will design one promotional piece per event (for a total of three promotional pieces) to publicize opportunities to participate. The promotional piece will be provided to the City for review, with one round of revisions. The City will be responsible for dissemination of the promotional piece through the City's website, social media platform, newsletters, printed mailings or other methods.

Task 3.3 Develop SLR-Related Options and Policies

Based on the review conducted in Task 3.1 and input received during Task 3.2, Michael Baker will develop an update of SLR-related goals/policies that may be used to address potential hazards. Potential goals/policies shall consider the City's unique geography, along with specific vulnerabilities identified in Task 2.

Task 3.4 Prepare Coastal Resiliency Plan

Michael Baker will prepare an administrative draft CRP update incorporating the vulnerability assessment and evaluating SLR options/policies (including guiding principles, goals and preparedness action). Michael Baker will provide an electronic administrative draft to the City for one round of comments/revisions. After incorporating the City's revisions, Michael Baker shall prepare a public review draft CRP to submit to the City. The City shall be responsible for circulating the public review draft CRP to the CCC and other stakeholders for a 30-day period. Comments shall be directed to the City, who will compile and document on behalf of Michael Baker. After the review period has closed, the City will submit all comments received to Michael Baker for review and incorporation into the final CRP. Michael Baker will then prepare the final CRP.

Task 3.5 Establish a Monitoring Program

Michael Baker assist the City in preparing a monitoring program, using publicly accessible data sources. The monitoring program shall complement the CRP and establish triggers for action in regard to SLR mitigation.







Task 4 | Coastal Element Update

Task 4.1 Draft Coastal Element Update

Based on the data collected through SLR VA and CRP, Michael Baker will initiate preparation of the Draft Coastal Element Update as the LCP Land Use Plan and Implementation Programs identifier. Michael Baker will identify components of the existing Coastal Element that warrant updates, along with reviewing other City plans/ordinances that require modification to be consistent with Coastal Element revisions. Additionally, new goals, objectives and policies will be identified/incorporated into the update as necessary. Michael Baker will prepare an administrative draft Coastal Element update for an electronic submittal. Michael Baker assumes one round of comments from the City, to prepare the public review draft Coastal Element Update. Michael Baker will then submit to the City for distribution during a 30-day review period. The City will be responsible for noticing the public review period to appropriate stakeholders. The public review draft Coastal Element Update will be available electronically on the City's website and will be distributed to interested parties for comment (including the CCC). Comments shall be directed to City staff, who will document for the Public Comment and Revision Summary. After the 30-day period, Michael Baker will review the comments for incorporation into the Final Coastal Element (Task 4.3).

Task 4.2 Prioritize Implementation Elements for Implementation Program

Michael Baker will analyze and prioritize implementation improvements within the Coastal Element Update (Task 4.1) based on vulnerability, impact, timeframe and cost. Each implementation measure will be labeled either a High, Medium, or Low priority, and ranked as appropriate. Michael Baker will also identify potential funding sources for the implementation of high priority projects.

Task 4.3 Final Coastal Element Update

Michael Baker will review all received comments on the public review Coastal Element Update, for incorporation into the final Coastal Element. All comments received shall be documented in the Public Comment and Revision Summary (including comments received during previous outreach efforts in Task 2 and 3) and input from CCC staff, City staff, officials, or other relevant parties. If comments received are not incorporated, Michael Baker will provide documentation for the reasoning behind such decision within the Public Comment and Revision Summary. Michael Baker develop the final Coastal Element for submittal to the City and CCC. Michael Baker will submit five (5) printed Coastal Element Update copies and one electronic copy to the CCC. The cover page shall reflect the CCC grant program financial contribution on the cover of the report.

Task 4.4 Planning Commission Recommendation and City Council Adoption

In coordination with the City's project management team, Michael Baker shall support City staff one (1) study session with the Planning Commission and one (1) study session with the City Council. The study session purpose shall be to discuss the Coastal Element Update preparation process, public outreach and the next steps toward certification. Michael Baker will prepare a PowerPoint presentation and handout materials to aid in this discussion. Two (2) Michael Baker staff members and two (2) M&N staff members will attend each study session. After study session facilitation, Michael Baker and M&N will attend two (2) hearings with the Planning Commission and two (2) hearings with the City Council to assist in local adoption. Michael Baker and M&N staff will be available to answer technical questions related to the Coastal Element update or the preparation process. Two (2) Michael Baker staff members and two (2) M&N staff member will attend. Fifteen (15) hardcopies of the following documents will be presented to the Planning Commission and City Council prior to the study session: final SLR VA, final CRP, and final Coastal Element Update.







Task 5 | Floodplain Ordinance Update

Task 5.1 Draft Floodplain Ordinance Update

Michael Baker will review the existing City Floodplain Ordinance and identify components that warrant modification. Based on data collected during the SLR Vulnerability Assessment, CRP, and Coastal Element Update, the Floodplain Ordinance will be revised to include these considerations. Michael Baker will develop an administrative draft Floodplain Ordinance Update for electronic submittal. One round of review and revisions from the City is assumed. Michael Baker will incorporate revisions into a public review draft Floodplain Ordinance. The public review draft will be provided to the City electronically, and the City will be responsible for noticing the 30-day public review period and circulating to interested parties (including the CCC). All comments shall be directed to the City and collected for incorporation in Task 5.3.

Task 5.2 Public Outreach and Information Process

Michael Baker will support and attend one workshop or pop-up activity focused on the floodplain ordinance update. We will work with the City to determine the best location, approach, purpose and content of each community outreach event. Michael Baker will design one promotional piece to publicize opportunities to participate. The promotional piece will be provided to the City for review, and one round of revisions is assumed. The City will be responsible for dissemination of the promotional piece through the City's website, social media platform, newsletters, printed mailings or other methods.

Task 5.3 Final Floodplain Ordinance Update

Michael Baker will review all received comments on the public review draft Floodplain Ordinance Update, for incorporation into the final ordinance. All comments received by the City shall be submitted to Michael Baker, and documented into a Public Comment and Revision Summary. Michael Baker will incorporate comments into the final Floodplain Ordinance; if comments received are not incorporated, Michael Baker will provide documentation for the reasoning behind such decision. Michael Baker will submit five (5) printed final Floodplain Ordinances and one (1) electronic copy to the CCC.

Task 5.4 Planning Commission Recommendation and City Council Adoption

In coordination with the City's project management team, Michael Baker shall support City staff for one (1) study session with the Planning Commission. The study session purpose shall be to discuss the Floodplain Ordinance Update preparation process, public outreach and the next steps toward adoption. Michael Baker will prepare a PowerPoint presentation and handout materials to aid in this discussion. Up to two (2) Michael Baker staff members and two (2) M&N staff members will attend. After study session facilitation, Michael Baker and M&N will attend one (1) hearing with the Planning Commission and one (1) hearing with the City Council to assist in local adoption. Michael Baker and M&N staff will be available to answer technical questions related to the Coastal Element update or the preparation process. Up to two (2) Michael Baker staff members and two (2) M&N staff member will attend. Fifteen (15) hard copies of the Floodplain Ordinance Update shall be presented to the Planning Commission and City Council prior to the study session.







C. Methodology - Schedule

TASK 1 - PROJECT LAUNCH	
Task 1.1: Project Kick-off Meeting	May 4, 2020 – ongoing
Task 1.3: Staff Coordination with Consultant to Track Project Progress	May 4, 2020 – ongoing
Task 1.4: Invoicing & Quarterly Reporting	Monthly
TASK 2 - SEA LEVEL RISE VULNERABILITY ASSESSMENT UPDATE	
Task 2.1: Background Data Collection Update	May 5, 2020 – May 29, 2020
Task 2.2: Coastal Conditions Assessment	May 5, 2020 – June 30, 2020
Task 2.3: Planning Area Inventory Update	May 5, 2020 – June 30, 2020
Task 2.4: Outreach Prior to Modeling	June 1, 2020 – July 15, 2020
Task 2.5: Model SLR Scenarios	July 15, 2020 – August 14, 2020
Task 2.6: Conduct Updated SLR Vulnerability Assessment	
Draft Preparation	August 17, 2020 – September 9, 2020
Screencheck Review	September 9, 2020 - September 16, 2020
Public Review Draft Preparation	September 16, 2020 – September 30, 2020
Public Review/CCC Review	September 30, 2020 - October 30, 2020
Final Preparation	October 31, 2020 – November 15, 2020
Task 2.7: Study Approach Summary	September 1, 2020 - September 30, 2020
TASK 3 - COASTAL RESILIENCY PLAN UPDATE	
Task 3.1: Review Current Plan, Existing Studies, and Adaptation Policies	October 1, 2020 – October 30, 2020
Task 3.2: Conduct a Public Outreach Process	November 2, 2020 – January 22, 2021
Task 3.3: Develop SLR-Related Options and Policies	November 2, 2020 – January 22, 2021
Task 3.4: Prepare Coastal Resiliency Plan	
Draft Preparation	November 2, 2020 – January 22, 2021
Screencheck Review	January 25, 2021 – January 29, 2021
Public Review Draft Preparation	February 1, 2021 – February 15, 2021
Public Review/CCC Review	February 15, 2021 – March 17, 2021
Final Preparation	March 17, 2021 – April 16, 2021
Task 3.5: Establish a Monitoring Program	January 4, 2021 – February 15, 2021
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C. Methodology - Schedule

TASK 4 - COASTAL ELEMENT UPDATE	
Task 4.1: Draft Coastal Element Update	
Draft Preparation	February 1, 2021 – July 5, 2021
Screencheck Review	July 5, 2021 – July 19, 2021
Public Review Draft Preparation	July 19, 2021 – July 30, 2021
Public Review/CCC Review	July 30, 2021 – August 30, 2021
Task 4.2: Prioritize Implementation Elements for Implementation Program	April 1, 2021 – July 1, 2021
Task 4.3: Final Coastal Element Update	August 30, 2021 - September 30, 2021
Task 4.4: Planning Commission Recommendation/City Council Adoption	November 15, 2021 – February 7, 2022
TASK 5 - FLOODPLAIN ORDINANCE UPDATE	
TASK 5 - FLOODPLAIN ORDINANCE UPDATE Task 5.1: Floodplain Ordinance Update Draft Preparation	April 1, 2021 – May 31, 2021
Task 5.1: Floodplain Ordinance Update	April 1, 2021 – May 31, 2021 May 31, 2021 – June 4, 2021
Task 5.1: Floodplain Ordinance Update Draft Preparation	
Task 5.1: Floodplain Ordinance Update Draft Preparation Screencheck Review	May 31, 2021 – June 4, 2021
Task 5.1: Floodplain Ordinance Update Draft Preparation Screencheck Review Public Review Draft Preparation	May 31, 2021 – June 4, 2021 June 4, 2021 – June 18, 2021
Task 5.1: Floodplain Ordinance Update Draft Preparation Screencheck Review Public Review Draft Preparation Public Review/CCC Review	May 31, 2021 – June 4, 2021 June 4, 2021 – June 18, 2021 June 18, 2021 – July 19, 2021

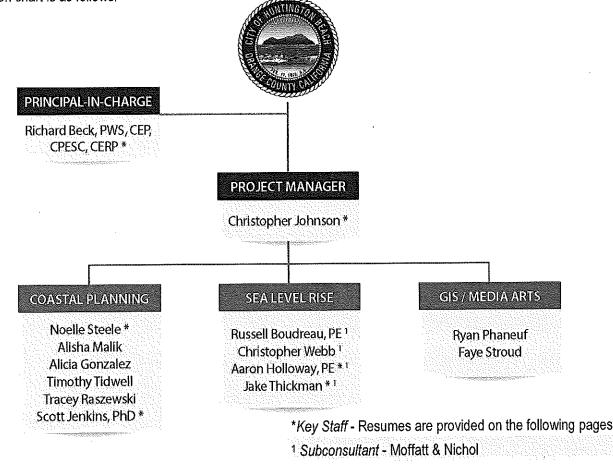
The proposed schedule is based on adherence to the identified review times. Michael Baker makes no representation as to the sufficiency of the review times, but they are intended to be an estimate of time needed for City and Coastal Staff reviews. Should review times change, said changes may result in adjustments to the overall project schedule in order for Michael Baker and its subconsultants to respond.







Michael Baker is the lead firm for this work program and will provide services from our Santa Ana office. The project organization chart is as follows:



Name, Project Role Years of Experience Degrees		
Alisha Malik, SITES AP, Community Engagement 5 B.S., 2012, Chemistry, Santa Clara University	Tracey Raszewski, Senior Project Manager 20 B.S. 2005, Business Management, University of Phoenix	
Alicia Gonzalez, Community Engagement 6 B.S., 2014 Biological Science, CSU San Marcos	Ryan Phaneuf, GIS 3 B.S. 2016, Environmental Sciences, Biola University	
Timothy Tidwell, Coastal Planner 5 M.S., 2012 Geography, GIS and Remote Sensing, SDSU B.A., 2007, Geography, SDSU	Faye Stroud, Graphic Designer 37 A.A., 1983, Commercial Art/Advertising Design, Colorado Institute of Art	
Russell Boudreau, P.E., Principal Coastal Engineer 40 M.E., 1980, Ocean Engineering, UC Berkeley B.A., 1978, Applied Mechanics, UC San Diego	Christopher Webb, Supervisory Coastal Scientist 26 M.A., 1989, Geography, SDSU B.A., 1986, Physical Geography, SDSU	





Richard Beck, PWS, CEP, CPESC, CERP | Principal-in-Charge

Mr. Beck has extensive experience in the regulatory and environmental disciplines. He successfully leads federal, state, local, and private-sector clients through the Clean Water Act, California Porter-Cologne Act, California Fish and Game Code, Endangered Species Act, and the California Coastal Act. Mr. Beck effectively drafts and negotiates state and federal regulatory applications for all types of projects. Overall, Mr. Beck's years of significant regulatory coordination has led to trusted relationships with regulatory staff at all levels.

Mr. Beck also focuses on shoreline protection and alternatives analyses statewide. Mr. Beck is currently providing professional coastal services for the Broad Beach Nourishment and Dune Restoration Project (Malibu, CA) and is actively working on the

Years of Experience: 20

Degrees:

B.A., 2000, Environmental Studies, University of California, Santa Cruz Certificate, 2010, Ecological Restoration, Saddleback College, CA

Sea Level Rise Vulnerability Assessments and Local Coastal Program Amendments for the cities of Seal Beach and Carlsbad. In 2017 he drafted a SLR Policy Memorandum for the California Department of Transportation (Caltrans), which outlined SLR planning measures and action items for transportation facilities within the Coastal Zone.

PROJECT EXPERIENCE

- SLR Analysis, LCP, and Zoning Ordinance Update, City of Carlsbad, CA. City of Carlsbad. Project Manager.
- · Local Coastal Program, Seal Beach, CA. City of Seal Beach. Coastal Planner
- On-Call Regulatory Services (since 2003). County of Orange. Project Manager/Regulatory Specialist

Christopher Johnson | Project Manager/Senior Coastal Planner

Mr. Johnson specializes in regulatory permit processing, planning, environmental regulations, construction coordination/support, and project management. He has extensive experience in the processing of Coastal Development Permits (CDP).

Mr. Johnson has 20 years of experience working specifically in the Coastal Zone. The types of projects he's contributed to or managed include master planned communities, hillside development, commercial development, regulatory permitting, transportation, structural/geotechnical remediation, and natural resources. The variation of project

Years of Experience: 20

Degrees:

B.A., 2000, Geography/Urban and Regional Planning, California State University, Long Beach

types coupled with the involvement of numerous disciplines has given Mr. Johnson a unique skill set and perspective with regards to the Coastal Act's policies and their implementation. Mr. Johnson has prepared and managed numerous submittals to the Coastal Commission. He is intimately familiar with the Commissions mandates and operations and has successfully navigated the coastal process and provided a timely delivery of Coastal Development Permits for numerous projects.

Mr. Johnson also coordinates with other state and federal agencies on a regular basis including the US Fish & Wildlife Service (USFWS), California Department of Fish & Wildlife (CDFW), Regional Water Quality Control Board (Regional Board) and the U.S. Army Corps of Engineers (Corps).

PROJECT EXPERIENCE

- SLR Analysis, LCP, and Zoning Ordinance Update, Carlsbad, CA. City of Carlsbad. Coastal Planner.
- Local Coastal Program, Seal Beach, CA. City of Seal Beach. Project Manager.
- Rancho Del Oro Flood Control Improvement Projects, Oceanside, CA. City of Oceanside. Environmental Lead

Michael Baker



Noelle Steele | Coastal Planner

Ms. Steele provides professional coastal planning, hazard mitigation, and emergency action/emergency response services for clients across the southern California region. Her experience includes LCPs and LCP Amendments incompliance with California Coastal Commission regulations, with specialized experience in sea level rise planning, policy, and implementation. In addition, she has also processed Coastal Development Permits on behalf of public and private clients. Her unique combination of experience as a policy planner and project applicant enhances the LCP development process, ensuring varied interests are equitably balanced. Outside of coastal hazards, Ms. Steele also prepares and certifies hazard mitigation plans and emergency action plans in compliance with Cal OES and FEMA guidelines. To complement her technical skillset,

Years of Experience: 6 Degrees:

E.M.U.P., (Candidate), Urban Planning, University of Southern California B.A., 2014, Environmental Studies, University of California, Santa Barbara

Ms. Steele is also experienced in developing hazard-focused and resiliency-based community engagement programs. She is IAP2 Foundations trained and is skilled in facilitating meaningful conversations to generate input throughout the planning process. She is also active in several professional organizations including Urban Land Institute (ULI) and NAIOP, demonstrating her professional commitment to building and maintaining resilient communities.

PROJECT EXPERIENCE

- SLR Analysis, LCP, and Zoning Ordinance Update, Carlsbad, CA. City of Carlsbad. Coastal Planner.
- Local Coastal Program, Seal Beach, CA. City of Seal Beach. Coastal Planner and Community Outreach Facilitator

Scott Jenkins, Ph.D. | SLR Technical Advisor

Dr. Jenkins has 30+ years of experience in coastal engineering and coastal processes numerical modeling. He has published 73 scientific papers and authored another 75 technical reports on a broad range of problems in coastal processes, including estuarine and littoral sediment transport, wave climate and sea level rise impacts on run-up, beach erosion and shoreline evolution, wave forces on structures, scour and burial of structures on the beach and seafloor, and hydrodynamic modeling of wetland restoration scenarios, dispersion and dilution of point and non-point source pollution, wastewater, thermal effluent and/or brine discharged from engineered outfalls. Dr.

Years of Experience: 37 Degrees:

Ph.D., 1980, Oceanography, University of San Diego B.S., 1972, Chemistry, Yale University

Jenkins performed a hydrodynamic design study for Caltrans District 11, developing innovative new bridge waterway designs for the proposed Interstate 5 North Coast Corridor Project that enhanced tidal circulation in the wetlands crossed by the I-5 bridges while minimizing the potential for local scour under those bridges. He provided tidal hydraulic and coastal process analysis for the Southern California Edison restoration project of the San Dieguito Lagoon that achieved habitat creation goals without adverse scour impacts on the I-5 and Highway 101 bridges or erosion impacts to the Del Mar beaches. He recently developed and published a Coastal Evolution Model that is consistent with algorithms in the U.S. Army Corps of Engineers Coastal Engineering Manual, but provides 3-dimensional predictive and mapping capability of the wave run-up field, beach erosion and shoreline recession under the effects of wave climate variability and SLR.

PROJECT EXPERIENCE

- Huntington Beach Desalination Project, Huntington Beach, CA. Poseidon Resources. Scientist.
- Coastal Project Design Storm Guidance and Wave Runup Analysis, Various, CA. Caltrans. Scientist
- Ocean Boulevard Imperial Beach ALTA. Imperial Beach, CA. Henderson Hospitality Group, LLC. Scientist





Aaron Holloway, P.E. | Senior Coastal Engineer

Mr. Holloway brings 15 years of experience in coastal and water resources engineering with a focus on coastal, riverine, and civil infrastructure projects. This experience has included vulnerability assessments and resiliency planning ranging from project level to regional scale studies to help clients understand and plan for impacts from rising sea levels. This experience has included design and modeling of beach nourishment projects, shore protection infrastructure, environmental restorations, and sand retention structures. Having led coastal projects from initial planning through permitting, design and construction he is uniquely qualified to perform vulnerability assessments and develop adaptation strategies in response to current and future coastal hazards.

Years of Experience: 15 Degrees:

M.S., 2008, Civil Engineering, California State University, Long Beach B.S., 2004, Civil Engineering, California State University, Long Beach

PROJECT EXPERIENCE

- General Plan Update, Huntington Beach, CA. City of Huntington Beach. Senior Engineer.
- Bluff Erosion Study, Huntington Beach, CA. City of Huntington Beach. Senior Engineer.
- Desalination Project SLR Analysis, Huntington Beach, CA. City of Huntington Beach. Project Manager
- SLR Vulnerability Assessment and Adaptation Plan, Seal Beach, CA. City of Seal Beach. Project Manager
- SLR Vulnerability Assessment and Adaptation Plan, Pismo Beach, CA. City of Pismo Beach. Project Manager

Jake Thickman | Coastal Scientist

Mr. Thickman has worked across several coastal science fields to address issues related to coastal community hazard resilience, coastal ecosystem health, and water quality. Through these diverse projects, Mr. Thickman has developed broad expertise related to coastal hazards and ecology, risk communication, and coastal/environmental planning.

As a coastal scientist for M&N, Mr. Thickman now applies these skills to resilience challenges in coastal zones, providing support in the areas of coastal hazards analysis, hazard mitigation, and adaptation strategy development for at-risk communities.

PROJECT EXPERIENCE

- SLR Vulnerability Assessment, Seal Beach, CA. City of Seal Beach. Coastal Scientist.
- Newport Bay AB691 SLR Assessment, Newport Beach, CA. City of Newport Beach, Coastal Scientist.
- SLR Vulnerability Assessment, Avalon, CA. City of Avalon. Coastal Scientist
- SLR Vulnerability Assessment, Dana Point, CA. City of Dana Point. Coastal Scientist

Years of Experience: 4 Degrees:

M.S., 2016, Marine and Atmospheric Sciences, Stony Brook University, New York M.A., 2013, Marine Conservation and Policy, Stony Brook University, New York

B.S., 2012, Environmental Science, University of Florida







E. Qualifications - Consultant Firm

Michael Baker

Founded in 1940 and celebrating 80 years of supporting our local communities, Michael Baker is a leader in environmental, planning, engineering, consulting, and technical/professional services with a local focus and global expertise. Michael Baker has a staff of more than 3,000 professionals with in-house expertise in disciplines that include Environmental Analysis, Planning, GIS Services, Surveying, Aerial Photogrammetry, Mapping, Real Estate Assessments, Transportation/Traffic Engineering, Civil Engineering (including Grading, Public Works, Water/Wastewater, Hydrology), Mechanical/Electrical/Energy Services, CADD, and Media Services. Michael Baker has provided coastal planning, impact analysis and permitting since the 1970's.

Michael Baker has a rich heritage and continued growth and expansion since inception. Our company possesses the highest level of expertise and provides project teams of highly qualified professionals to undertake a diverse range of projects, with solutions focused on sustaining the future. The following practices and services are relevant to the City's project.

Michael Baker Related Practices and Services		
Resiliency Planning Climate Action Plans Climate Change Adaptation Plans Disaster Planning Evacuation Plans GHG Inventories/Forecasts Hazard Mitigation Planning Safety/Hazards Planning Sea Level Rise Analysis Social Vulnerability Assessments	 Environmental Planning Biological Services Biological Resource Modeling CEQA Community Impact Assessment Local & Regional Regulatory Plans & Permits Mitigation Monitoring NEPA Natural Resource Planning Stream Restoration 	Community Planning Comprehensive Plans/General Plans Design Guidelines Development Codes Healthy & Sustainable Communities Land Use Plans Policy Planning Special District Formation Zoning Ordinances
Stormwater • Erosion Control • Flood Management Engineering • Regional Flood Protection Systems • Hydrologic/Hydraulic Modeling • Regional Frequency Analysis • Ecosystem Restoration/Wetlands Permitting	 Military & Federal Planning Sustainability Assessment Environmental Assessments Emergency Management Evacuation Planning 	 Public Engagement Advisory Committees Meeting Facilitation Public Education Social Media Strategy & Implementation Stakeholder Interviews Workshops Websites

Michael Baker is focused on building more resilient communities, ones that are capable of responding effectively in any natural emergency situation. We have assisted cities, counties, regions, and states across the nation to prepare their hazard mitigation plans, emergency operations, evacuation and shelter plans, along with other sustainability and resiliency services, including coastal planning.

We use a comprehensive set of face-to-face techniques and online tools and techniques to engage, educate and collaborate with local communities and stakeholders. Our goal is to build community capacity and to enhance decision-making through thoughtful facilitation, innovative technologies, creative events and activities, and with meaningful dialogue so that clients and communities benefit.





E. Qualifications - Subconsultant

Moffatt & Nichol

M&N was founded in Long Beach, California, in 1945 to provide design engineering services to the evolving U.S. maritime industry. This basis led M&N to be one of the first engineering firms in the world to embrace the concept of modern coastal engineering. Today, M&N's 38 offices and more than 800 employees worldwide includes the largest collection of coastal engineers of any consulting firm in the United States. Our elite, influential staff of scientists, planners, and engineers are recognized for solving global issues related to coastal, estuarine, and riverine systems.

Building upon M&N's reputation for excellence in coastal engineering, our coastal resiliency specialists weave unique experience developed through more than 4,000 waterfront projects with innovative approaches for an uncertain future. M&N experts have assessed hazards, developed adaptation plans, and designed solutions in key coastal areas of the United States already suffering intense, high profile climate-related impacts like Miami, New York City, Norfolk, North Carolina, and Louisiana.

More than half a century of designing coastal flood protection projects has prepared our staff with exceptional expertise on how current and predicted SLR hazards vary significantly across regions and stretches of coastline. Our Southern California SLR team applies unparalleled familiarity with complex, situational coastal processes and development patterns to efficiently deliver world-class solutions for local and regional SLR resilience.

REGIONAL SLR EXPERIENCE:

Our team has been at the forefront of addressing the challenges and uncertainties of climate change and increased coastal hazards due to SLR. In the last five years, our team has worked on 29 studies throughout Southern California to inform long-term planning efforts, such as LCP updates and General Plan updates. M&N has developed city-wide SLR vulnerability studies and adaptation plans for several cities in California, including Huntington Beach, Seal Beach, Avalon, Morro Bay, Dana Point and San

Morro Bay GP/LCP, Morro Bay Plsmo Beach SLR VA, Pismo Beach Garden Street Hotel SLR VA. Santa Rarbara McGrath State Beach SLR Study, Ventura CA Venice LCP, Venice Beach Belmont Beach & Aquatics Center SLR Evaluation, Long Beach Seal Beach LCP, Seal Beach SLR Consulting Services, Long Beach Hellman Ranch Gas Plant SLR VA, Seal Beach Huntington Beach Desai SLR VA, Huntington Beach Huntington Beach SLR Assessment, Huntington Beach Newport Beach SLR VA, Newport Beach Banning Ranch SLR VA, Newport Beach City of Avalon LCP, Avalon Newport Bay SLR VA, Newport Beach Doheny State Beach HMP, Dana Point Dana Point SLR VA/LCP, Dana Point Dana Point Harbor SLR VA, Dana Point San Clemente SLR VA, San Clemente San Onofre State Beach HMP, San Onofre SCALE OF WORK KEY: Carlsbad SLR VA. Carlsbad PROJECT CITY REGIONAL Coast Hwy 101 Pump Station SLR VA, Encinitas Los Angeles - San Diego - San Luis Obispo Rail SLR Study, San Diego ABBREVIATION KEY: De Anza SER Study, San Diego EIR: Environmental Impact Report Mission Bay Program EIR SLR Evaluation, San Diego GP: General Plan San Diego Association of Governments Regional SLR Study, San Diego HMP: Hazaid Management Plan San Diego Association of Governments SLR Adaptation Plan, San Diego LCP: Local Coastal Program SLR: Sea Level Rise Strategic Environmental Res/Dev Program SLR Assessment, San Diego VA: Vulnerability Assessment Coronado Yacht Club SLR Study, Coronado

Clemente. All of these cities have similar pressures defined by their unique legacies, engaged communities that live on the coast with an active commerce dependent on tourism. M&N's extensive portfolio of sea level rise experience in Southern California is highlighted on the map below.





PROPOSAL

Huntington Beach Comprehensive IT A Local Coastal Program Update



E. Qualifications - Representative Projects

Local Coastal Program | Seal Beach, CA

Michael Baker is assisting the City of Seal Beach in certifying the first Local Coastal Program (LCP) for the City's coastal zone, generally defined as jurisdiction south of Westminster Boulevard. Michael Baker documented baseline conditions for environmentally sensitive habitat areas, existing land uses, low cost visitor serving accommodations, and beach access/public use. The planning process incorporated a high level of community engagement, including more than ten stakeholder interviews (with community groups, public agencies and local businesses), two public workshops and one pop-up booth at the annual Seal Beach Car Show, to educate the public and solicit public input. M&N performed four sea level rise modeling scenarios as part of the vulnerability assessment, used to inform the proposed policy framework. Specific adaptation measures were developed in response to identified hazards within Old Town/Main Street neighborhood, inland neighborhoods, and the Surfside community. Outside of the sea level rise vulnerability analysis and adaption measures, Michael Baker developed LCP Land Use Plan (LUP) policies focused on low-cost visitor serving accommodations, ESHA, water quality, public access and more, in accordance with the Coastal Commission guidance. Michael Baker assisted the City in preparing a grant application for the second phase of LCP preparation, including the Implementation Program preparation, additional community outreach, and LCP finalization and certification.

Team Members/Role

- Richard Beck/Coastal Planner
- Christopher Johnson/Project Manager
- Noelle Steele/Coastal Planner
- Timothy Tidwell/Coastal Planner

Project Dates

- Start: September 2016
- End: On-going

Reference

City of Seal Beach Steve Fowler, Senior Planner (562) 431-2527 x1316 sfowler@sealbeachca.gov



General Plan and Local Coastal Program Update | Carlsbad, CA

Michael Baker is assisting the City of Carlsbad in amending the existing LCP to be consistent with Coastal Commission guidance on sea level rise and conducting a major update to the Zoning Ordinance. Michael Baker conducted extensive background research and best-practices recommendations for policy revisions relating to sea level rise. Additionally, low-cost visitor serving uses and accommodations policies were updated. M&N produced a coastline vulnerability study for the City that identifies coastal areas susceptible to damage from SLR. The report projects potential coastal hazards over two timeframes (2050 and 2100) and identifies the vulnerability/risks of these hazards to various city assets. Adaptation measures were presented to improve the resiliency of vulnerable assets.

Additionally, Michael Baker is responsible for preparing the first comprehensive revision of the Zoning Ordinance since the original adoption in the 1950s. The Zoning Ordinance will implement the 2015 General Plan Update and the Local Coastal Program Amendments, and involves a full code reorganization with best practices. Sections were streamlined and consolidated to remove redundant provisions, and included a new/amended definitions section including graphics, to ensure the code is user friendly and easy to navigate.

Team Members/Role

- Richard Beck/Project Manager
- Christopher Johnson/Coastal Planner
- Noelle Steele/Coastal Planner

Project Dates

- Start: October 2015
- · End: On-going

Reference

City of Carlsbad Jennifer Jesser, Senior Planner (760) 602-4637 jennifer.jesser@carlsbadca.gov







E. Qualifications - Representative Projects

Camp Pendleton Desalination Test Facility | San Diego, CA

Michael Baker designed, built, and operated a test desalination facility at Camp Pendleton along the Pacific Ocean. The results of the test facility could help the authority decide if building a full-scale desalination facility at the base is feasible.

The county faced a major test as it worked to meet its long-term water needs during a prolonged drought, and desalination of ocean water was a potential solution. Michael Baker designed the new test facility to analyze the merits of two different ocean water intake approaches over a one-year period: one that gathered water using a screen near the bottom of the ocean, and another that collected water below the seafloor. The results of the tests helped identify the most feasible, cost-effective, and environmentally sensitive way to implement a desalination intake at the base that was consistent with new state regulations.

For the project, Michael Baker provided environmental permitting, design, construction, operation, and collection and analysis of data during the testing period. After the completion of the test, Michael Baker prepared a report with a projected cost analysis for operation of a full-scale plant and the decommission and removal of the pilot facility.

Team Members

- Richard Beck/Project Manager
- Chris Johnson/Environmental Planner
- Noelle Steele/Environmental Planner

Project Dates

- Start: November 2015
- End: October 2018

Reference

San Diego Co. Water Authority Jeremy Crutchfield Project Manager (858) 522-6834 jcrutchfield@sdcwa.org



Additional Projects | Various, CA

Project Name Location	SLR	LCP	Zoning/GP
Coastal Design Storm Guidelines and Wave Runup Analysis Statewide, CA	Х	Х	
SLR Assessment Monterey, CA	Х	Х	
Ocean Desal Coastal Hazards Analysis Doheny State Beach, CA	Х	Х	
General Plan and Local Coastal Plan Update Morro Bay, CA	Х	X	X
General Plan Update Huntington Beach, CA	Х	X	X
Bayfront SLR Chula Vista, CA	Х	Х	
Housing Project Coastal Hazards Analysis Richmond, CA	Х	Х	
General Plan Update EIR and Climate Change Section San Mateo, CA	Х	Х	X
Local Coastal Plan Additional Services Seaside, CA	Х	Х	
General Plan Update and Community Outreach Hermosa Beach, CA	Х	Х	X
General Plan Update and Program EIR Huntington Beach, CA	Х	Х	Х
General Plan Update and Program EIR Corte Madera, CA	Х	X	X





E. Qualifications - Representative Projects

General Plan Update | Huntington Beach, CA

The potential impacts of SLR and climate change on low-lying infrastructure and development have been key factors to consider as the City of Huntington Beach moves forward with updating its comprehensive general plan. Working with the city's planning consultant, M&N performed an SLR vulnerability assessment to identify infrastructure, development and coastal resources at risk of flooding through 2100.

With about six miles of exposed coastline and portions of the city lying at elevations of less than 10 feet above mean sea level, the city's flood risk will increase significantly if SLR as projected. In addition to critical public infrastructures, such as public utilities and highways, there are also high value private developments, businesses, and residences at risk of impacts due to coastal and riverine flood hazards influenced by SLR.

Several SLR scenarios were modeled in conjunction with other coastal flooding factors such as storm waves and upland flooding from significant rainfall events. Two-dimensional hydrodynamic modeling using RMA-2 was performed to evaluate the impacts of SLR on riverine flooding in the Bolsa Channel, East Garden Grove Wintersburg Channel, the Fountain Valley Channel and the Huntington Beach Channel. Model results were used to map flood hazard zones for each scenario along with a geo-referenced inventory of affected infrastructure. The SLR study provides the City with guidance toward developing adaptive management policies for protecting

Team Members/Role

- Russell Boudreau/Engineer
- Christopher Webb/Scientist
- Aaron Holloway/Engineer

Project Dates

- Start: October 2013
- End: October 2017

Reference

City of Huntington Beach Jennifer Villasensor Project Manager (714) 374-1661 ivillasenor@surfcity-hb.org



ment | Avalon, CA

Avalon SLR Vulnerability Assessment and Targeted LCP Amend-

M&N completed a SLR vulnerability assessment for the City of Avalon to inform a targeted amendment of their LCP to address coastal hazards associated with SLR. The objective of the study was to identify potential impacts to coastal resources, both natural and developed, under a range of SLR scenarios and evaluate a variety of adaptation strategies that could reduce these impacts. The study was funded in part by a California Coastal Commission grant (LCP 17-07) and included community outreach workshops to share information and gather feedback from the community on important resources along the Avalon coast.

The City is faced with unique wave hazards that were not captured in regional modeling efforts such as CoSMoS. M&N performed 2-dimensional wave modeling for locally important storm events and an empirical analysis of wave runup and overtopping to identify potential hazard exposure zones for a range of SLR scenarios. The vulnerability assessment identified potential impacts on important resources such as the beach access and recreation zones along Avalon Harbor, storm impacts at Cabrillo Mole and overwater structures. A variety of adaptation strategies could be applied to mitigate these impacts including elements of protection, accommodation and managed retreat. The report included an overview of these potential adaptation strategies and identified several planning objectives to form the basis for policy development in a future update of the LCP.

Team Members/Role

- · Russell Boudreau/Engineer
- Aaron Holloway/Scientist
- Jake Thickman/Scientist

Project Dates

- Start: May 2018
- End: December 2019

Reference

City of Avalon Amanda Cook Project Director (310) 510-0220 acook@cityofavalon.org



Michael Baker

PROPOSAL Huntington Beach Comprehensive Local Coastal Program Update

EXHIBIT A



F. Fee Proposal

	MICHAEL BAKER									MOFFAT				
TASK	Principal \$220	Project Manager \$195		Coastal Planner \$120	Community Engagement \$135	GIS Specialist \$105	Graphic Designer \$156	Admin. \$85	Principal \$266	Project Manager \$207	Senior Coastal Scientist \$222	Coastal Scientist \$129	STAFF HOURS	TOTAL COST
TASK 1 - PROJECT LAUNCH														
Task 1.1 & 1.3: Consultant Kick-off Meeting and Staff Coordination	4	4		8					2	2		2	22	\$3,82
Task 1.4: Invoicing & Quarterly Reporting	2	4		16						8			30	\$4,79
TASK 2 - SEA LEVEL RISE VULNERABILITY ASSESSMENT UPDATE														
Task 2.1: Background Data Collection Update		2		4					2	8	4	16	36	\$6,01
Task 2.2: Coastal Conditions Assessment		2		4					2	10	4	24	46	\$7,45
Task 2.3: Planning Inventory Update		2		24					2	12	4	32	76	\$11,30
Task 2.4: Outreach Prior to Modeling	2	8		24					2	16	6	16	74	\$12,12
Task 2.5: Model SLR Scenarios		2		8					2	16	4	40	72	\$11,24
Task 2.6: Conduct Updated SLR Vulnerability Assessment	2	5		16					2	16	4	48	93	\$14,25
Task 2.7: Study Approach Summary		1		2					2	8	4	16	33	\$5,57
TASK 3 - COASTAL RESILIENCY PLAN UPDATE														
Task 3.1: Review Current Plan, Existing Studies, and Adaptation Policies	2	8		30					2	8		8	58	\$8,82
Task 3.2: Conduct a Public Outreach Process														
Online Community Survey		2		24									26	\$3,27
Web Content/Social Media	2	2		30			10						44	\$5,99
Community Workshop and Pop-Up Activities (2)		6		40	12		30		2	16	4	16	126	\$19,06
Task 3.3: Develop SLR-Related Options and Policies	2	6		24					2	12	4	32	82	\$12,52
Task 3.4: Prepare Coastal Resiliency Plan		6		60		20			4	16	8	24	138	\$19,71
Task 3.5: Establish a Monitoring Program		2		6					2	4	4	8	26	\$4,39
TASK 4 - COASTAL ELEMENT UPDATE														
Task 4.1: Draft Coastal Element Update	1	4		40		40							85	\$10,00
Task 4.2: Prioritize Implementation Elements for Implementation Program		4		20									24	\$3,18
Task 4.3: Final Coastal Element Update		4		30		21							55	\$6,58
Task 4.4: Planning Commission Recommendation and City Council Adoption		4		24						8		8	44	\$6,34
TASK 5 - FLOODPLAIN ORDINANCE UPDATE														
Task 5.1: Draft Floodplain Ordinance Update	2	4		40									46	\$6,02
Task 5.2: Public Outreach and Information Process				12	10		8						30	\$4,03
Task 5.3: Final Floodplain Ordinance Update		2		16									18	\$2,31
Task 5.4: Planning Commission Recommendation and City Council Adoption	2	6		24						5		5	42	\$6,17
CONTINGENCY FEE			1											\$40,00

Michael Baker

Principal—Richard Beck GIS Specialist—Ryan Phanuef

Project Manager—Christopher Johnson Community Engagement Staff—Alicia Gonzalez & Anisha Malik, (Blended Rate)

Senior Planner—Tracey Raszewski (Assistant PM Support) Graphic Designer—Faye Stroud

Coastal Planners—Noelle Steele & Timothy Tidwell Admin.—Diane O'Dell

Moffatt & Nichol

Principal—Russell Boudreau Senior Coastal Scientist—Christopher Webb Coastal Scientist—Jake Thickman

SUBTOTAL	\$235,011
ODC*	\$4,989
TOTAL	\$240,000







G. Deliverables

Deliverables	Deadline							
Task 1: Project Launch	May 5, 2020 – November 15, 2020							
Project kick-off meeting notes	One Week After Scheduled Kick-Off Meeting Date							
Executed consultant contract	May 4, 2020							
Invoice packages and quarterly reports	Monthly							
Task 2: Sea Level Rise Vulnerability Assessment Update	May 5, 2020 – November 15, 2020							
Updated Baseline Conditions Assessment and Memo	July 15, 2020							
Draft SLR Vulnerability Assessment	September 30, 2020							
Final SLR Vulnerability Assessment	November 15, 2020							
Task 3: Coastal Resiliency Plan Update	April 1, 2021 – July 1, 2021							
Public Outreach Presentation and Summary	January 29, 2021							
Monitoring Program Summary	February 26, 2021							
Draft Coastal Resiliency Plan Update	February 26, 2021							
Final Coastal Resiliency Plan Update	April 16, 2021							
Task 4: Coastal Element Update	February 1, 2021 – February 7, 2022							
Draft Coastal Element Update	July 30, 2021							
Priority Report and Potential Funding Sources	July 30, 2021							
Final Coastal Element Update	September 3, 2021							
Submittal of locally-adopted Coastal Element Update	February 7, 2022							
Task 5: Floodplain Ordinance Update	April 1, 2021 – February 7, 2022							
Draft Floodplain Ordinance Update	June 18, 2021							
Public Outreach Slideshow Presentation and Meeting Notes	June 18, 2021							
Final Floodplain Ordinance Update	August 30, 2021							
Slideshow Presentation and Meeting Notes	February 7, 2022							



PROPOSAL Huntington Beach Comprehensive Local Coastal Program Update

EXHIBIT B



F. Fee Proposal

		MICHAEL BAKER									MOFFATT & NICHOL				
TASK	Principal \$220	Project Manager \$195		Coastal Planner \$120	Community Engagement \$135	GIS Specialist \$105	Graphic Designer \$156	Admin. \$85	Principal \$266	Project Manager \$207	Senior Coastal Scientist \$222	Coastal Scientist \$129	STAFF HOURS	TOTAL COST	
TASK 1 - PROJECT LAUNCH															
Task 1.1 & 1.3: Consultant Kick-off Meeting and Staff Coordination	4	4		8					2	2		2	22	\$3,824	
Task 1.4: Invoicing & Quarterly Reporting	2	4		16						8			30	\$4,796	
TASK 2 - SEA LEVEL RISE VULNERABILITY ASSESSMENT UPDATE															
Task 2.1: Background Data Collection Update		2		4					2	8	4	16	36	\$6,010	
Task 2.2: Coastal Conditions Assessment		2		4					2	10	4	24	46	\$7,456	
Task 2.3: Planning Inventory Update		2		24					2	12	4	32	76	\$11,302	
Task 2.4: Outreach Prior to Modeling	2	8		24					2	16	6	16	74	\$12,120	
Task 2.5: Model SLR Scenarios		2		8					2	16	4	40	72	\$11,242	
Task 2.6: Conduct Updated SLR Vulnerability Assessment	2	5		16					2	16	4	48	93	\$14,259	
Task 2.7: Study Approach Summary		1		2					2	8	4	16	33	\$5,575	
TASK 3 - COASTAL RESILIENCY PLAN UPDATE														1	
Task 3.1: Review Current Plan, Existing Studies, and Adaptation Policies	2	8		30					2	8		8	58	\$8,820	
Task 3.2: Conduct a Public Outreach Process															
Online Community Survey		2		24									26	\$3,270	
Web Content/Social Media	2	2		30			10						44	\$5,990	
Community Workshop and Pop-Up Activities (2)		6		40	12		30		2	16	4	16	126	\$19,066	
Task 3.3: Develop SLR-Related Options and Policies	2	6		24					2	12	4	32	82	\$12,522	
Task 3.4: Prepare Coastal Resiliency Plan		6		60		20			4	16	8	24	138	\$19,718	
Task 3.5: Establish a Monitoring Program		2		6					2	4	4	8	26	\$4,390	
TASK 4 - COASTAL ELEMENT UPDATE															
Task 4.1: Draft Coastal Element Update	1	4		40		40							85	\$10,000	
Task 4.2: Prioritize Implementation Elements for Implementation Program		4		20									24	\$3,180	
Task 4.3: Final Coastal Element Update		4		30		21							55	\$6,585	
Task 4.4: Planning Commission Recommendation and City Council Adoption		4		24						8		8	44	\$6,348	
TASK 5 - FLOODPLAIN ORDINANCE UPDATE														1	
Task 5.1: Draft Floodplain Ordinance Update	2	4		40									46	\$6,020	
Task 5.2: Public Outreach and Information Process				12	10		8						30	\$4,038	
Task 5.3: Final Floodplain Ordinance Update		2		16									18	\$2,310	
Task 5.4: Planning Commission Recommendation and City Council Adoption	2	6		24						5		5	42	\$6,170	
CONTINGENCY FEE														\$40,000	

Michael Baker

Principal—Richard Beck GIS Specialist—Ryan Phanuef

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SUBTOTAL	\$235,011
ODC*	\$4,989
TOTAL	\$240,000

