



## The Urban Tides Community Science Initiative: Capture the Future of our Urban Ocean

### You can help document the impacts of rising sea levels in your community

Sea level rise in Southern California is expected to match global projections with an increase of 5- 24 inches by 2050. Winter storms and king tides offer a glimpse of what flooding and future sea level rise will look like in our communities.

Urban Tides is a community based science effort to photo-document tides, coastal flooding and beach erosion in Southern California. The initiative has designated a series of beach and wetland locations where the public can take photographs of changing tides, flooding and erosion, then upload them into a database.

### You can engage in meaningful science

Visualizing today's risks enables community leaders and local governments to set priorities as they plan strategies that will help the region adapt to the future impacts of sea level rise. Images also provide critical information to help ground truth and calibrate scientific models used to identify vulnerable locations along our coast.

USC Sea Grant is building partnerships with non-formal education centers, schools, nonprofit organizations, and local municipalities in Southern California to engage communities in this effort. It's your coastline! Your observations about how and where it is changing will help further the collective dialogue about how we can adapt to rising seas.

For more information, visit: <http://bit.ly/1O0arhl>

### It is easy to participate in Urban Tides!

Just join the database online, download the mobile app, and then use the app to snap and upload your photos. You may also take photos with your phone or a camera and upload them using your computer.

1. Visit <https://getliquid.io> to join the Urban Tides database, which is hosted by Liquid. To set up your account, establish a username and password. Then sign into the new account.
2. On the homepage, select and join the Urban Tides Community Science Initiative dataset.
3. Using your smart phone: go to the App store to download and install the "liquid mobile data collection" application. Open and login to the app. Since you already joined the dataset on your computer, the Urban Tides dataset will open when you login.
4. Select 'new record'. You will take each photo\* using the camera icon within this form. Fill in all required data in the form, then press 'submit'. You are done!
5. If using a computer to upload a photo, enter the Urban Tides dataset on the Liquid website. Click on 'add record'. Use the camera icon to upload each photo\* from your desktop. Fill in all required data in the form, then press 'submit'.

\*Please see page 2 for more guidance on filling out the form and taking a photo that will provide the best possible data.

## Guidance for taking a picture:

1. Working with scientists, we have designated a series of photo site locations that will provide good data for this initiative. Use the 'Photo Locations' Google map: <http://bit.ly/2eSd4oo> to identify your photo location of choice.
2. Once you arrive at the location\*, take a few moments to watch the water. Then, take two steps or strides landward from the water line. Take the photo facing parallel to the shoreline. Include some sort of structure or feature in your picture, such as a pier, jetty, breakwater or dock, for perspective. This will help scientists better identify the water line.
3. Ideally, you'll want your picture to catch the wave as it reaches the highest water line. This definitely requires some patience and luck that no one walks through your picture just as the wave hits the highest point! But, even pictures that show the water line and some water from the waves are still very useful. When you are ready - take your picture!
4. If using the iPhone app, you must take the photo using the camera icon in the data entry form.

\*Important: If you will be uploading your photo from a computer, use your phone's compass to take a GPS location in latitude and longitude before you change locations.

## Guidance for filling out the form to provide the best possible data for each photo:

### Using the mobile phone app:

1. Location: Click on "Use Current Location" so that you get the most accurate location of the picture. This button will auto populate the latitude and longitude. This is a required field.
2. Location Description: Please be as descriptive as you can about your location. This is a required field. Examples of how to populate this field include:
  - a. At 3rd Street in Manhattan Beach, 15 feet back from high water line, standing in front of a berm
  - b. At Ballona Lagoon
3. Orientation: Use your phone's compass and then select the orientation from the drop down menu in the form. This is a required field.
4. Date: This will auto populate on your iPhone. This is a required field.
5. Time: This will auto populate on your iPhone. This is a required field.
6. General Comments: This is the field to provide anything that you find interesting about your photo or information you feel is important to convey. This *is not* a required field.
7. Photographer's Name: When you sign up for the app, we will have your email information. If you would like your name associated with the image, please enter your name here. This *is not* a required field.

