



After more than 9 months of development, the first product in our new Ultimate Terrain X product line for FSX is finally ready for release. We hope this slideshow gives you a good understanding of how *Ultimate Terrain X - USA* can enhance your Flight Simulator X environment.

# Scenery Solutions

## About Scenery Solutions LLC:

Scenery Solutions is a Texas based Limited Liability Corporation. We have been in the commercial flight simulation business since 2003.

Scenery Solutions was the first company to use commercial road data in a flight simulator product with our "USA Roads" product line.

Our "Ultimate Terrain" series for FS2004 has won multiple awards, and been highly praised by both the industries top reviewers and our users.

Scenery Solutions has partnerships with the premier developers of map data products including: Tele Atlas, Navteq and DMTI Spatial.

All Scenery Solutions products are marketed and distributed by Flight One Software.

# Flight Simulator X And Ultimate Terrain X



Microsoft's new Flight Simulator X (FSX) is clearly the most advanced PC-based flight simulator to date. In addition to the technological advances, the simulator contains a much improved terrain environment over its predecessors.

While the FSX environment is impressive in itself, *Ultimate Terrain X* will take your FSX terrain environment to new levels not seen before in a PC Flight Simulator.

Ultimate Terrain X has been designed from the ground up to take advantage of the new technologies in FSX, and provide you with the most superior and complete large terrain environment to date. As always, we use only the highest quality commercial source data in our products.

*Ultimate Terrain X* is our biggest and best flight simulator product yet. We hope that this slideshow preview gives you a good overview of the new features and what they can do to further improve your FSX enjoyment.

# Landclass

In the future, the terrain in flight simulator products will most likely consist of high-resolution photographic images. But, this is not a practical solution today, except for smaller regional scenery packages. High quality photographic images are not available worldwide at this time. Also, photographic scenery have huge storage requirements. This basically makes it impossible for users to store large areas of 1 meter resolution images on their hard drives. Plus, there is so much variety in photographic images, that it would be difficult to accurately blend in different regions.

Microsoft's solution to this problem, is to divide the entire earth up into 1km x 1km tiles. Each block is then assigned to 1 of 93 possible textures available within FSX. The 93 landclass textures have been carefully designed to blend in perfectly with each other along the 1km x 1km borders.

The method of assigning each 1km x 1km block to a particular texture type is called Landclass. In flight simulator terms, landclass stands for land classification.

The key to any good landclass product, is the proper assignment of the available landclass textures to each 1km x 1km block worldwide.

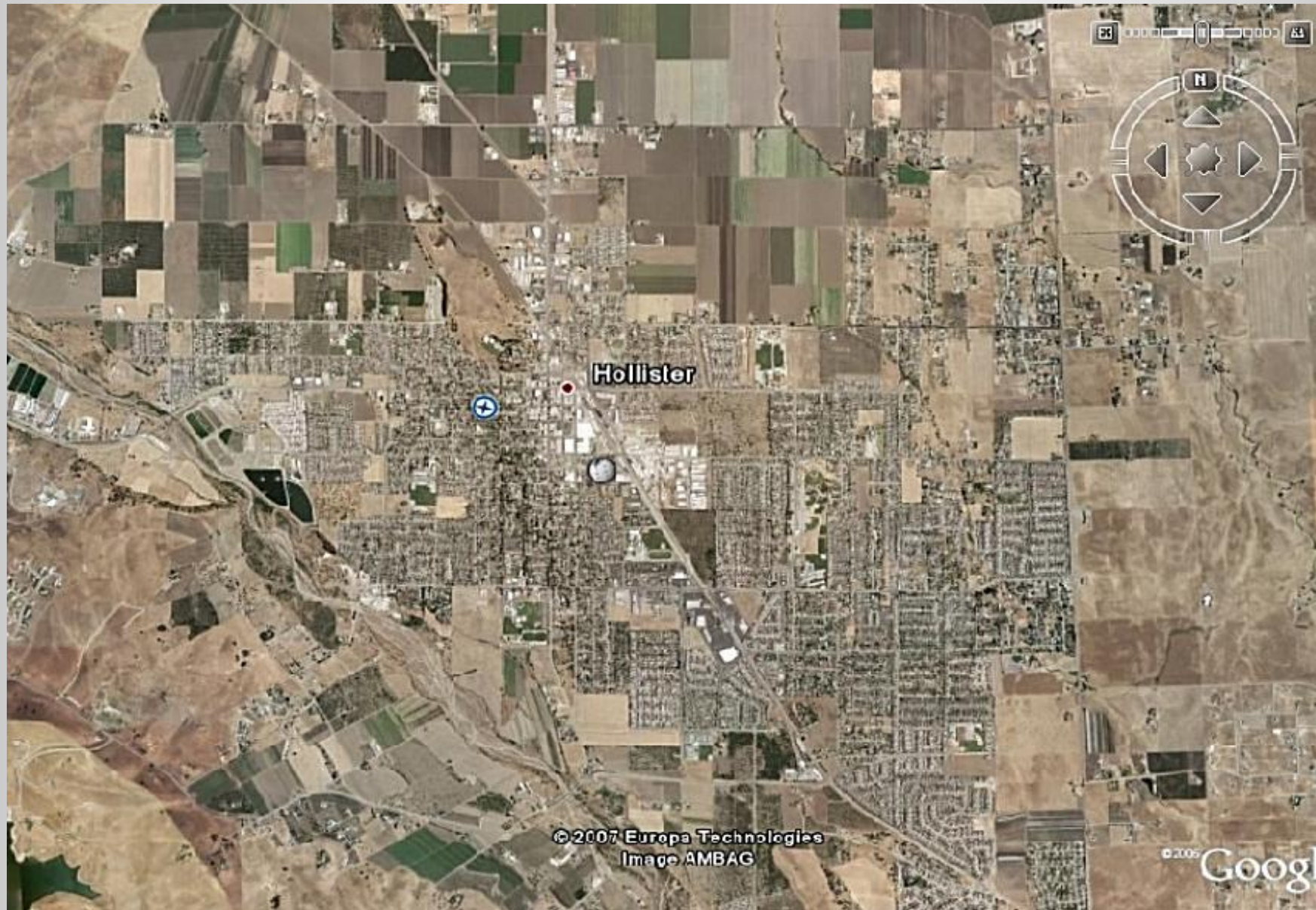
*Ultimate Terrain X* will dramatically improve the accuracy of cities in FSX using our proprietary "Synthetic Landclass" generation system, which generates urban landclass based on recent commercial data sources. For important areas like city centers and commercial activity zones, we use hi-resolution photos as source data for the accurate placement of landclass textures.

In the USA, there are basically 6 different sets of landclass textures available to represent the different levels of urban sprawl. These textures are used in the wetter, more seasonal areas. In addition, there are 5 urban texture sets available for dry regions.

In addition to making optimal use of the existing urban landclass textures in FSX, *Ultimate Terrain X* provides 6 brand new landclass textures to add more variety to the urban landscape.



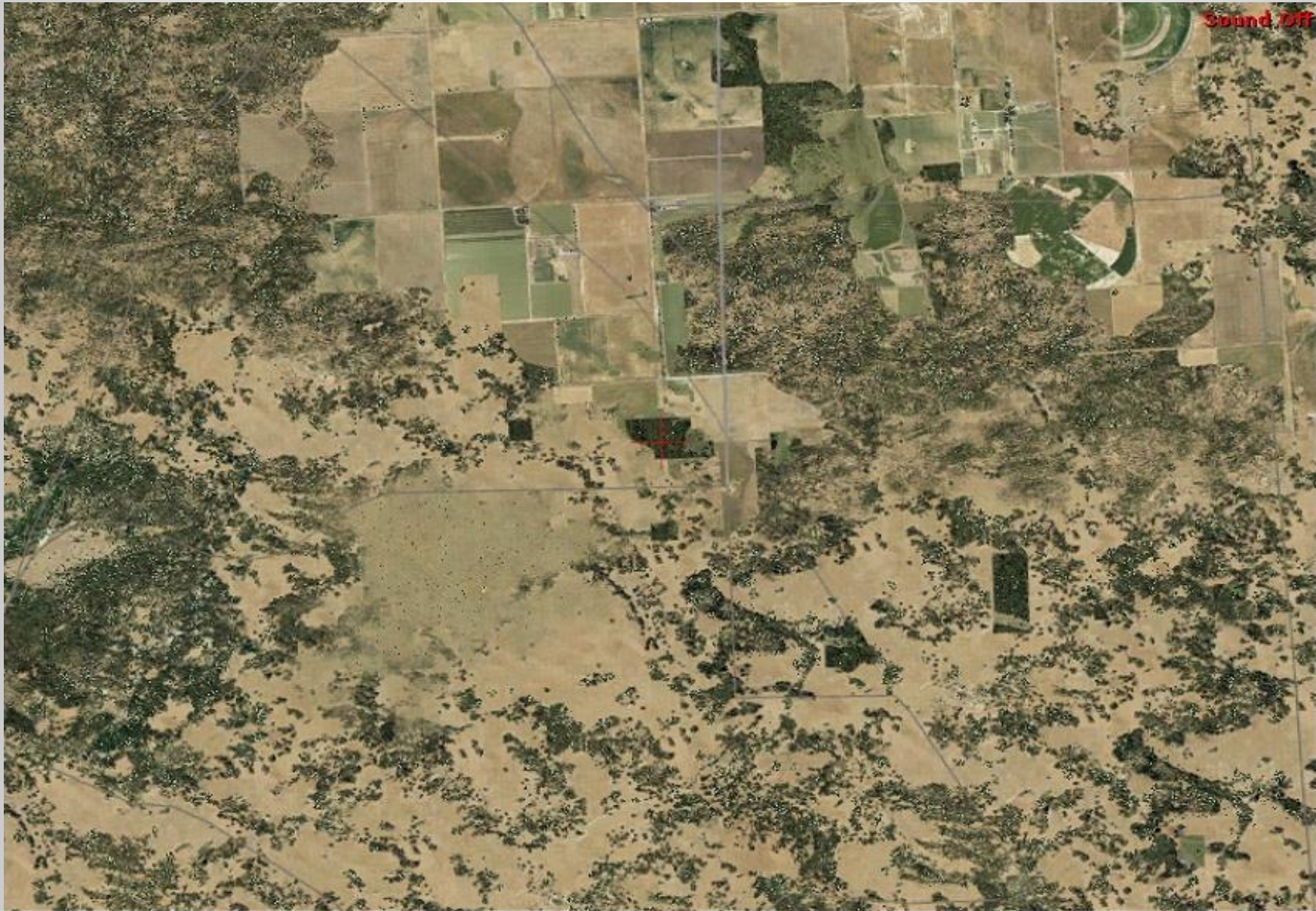
## Landclass – Hollister, California (Google Earth Image)



Hollister, California is a city with a population of nearly 40,000 people. Here is a satellite image from Google Earth, that shows the city in it's actual layout.



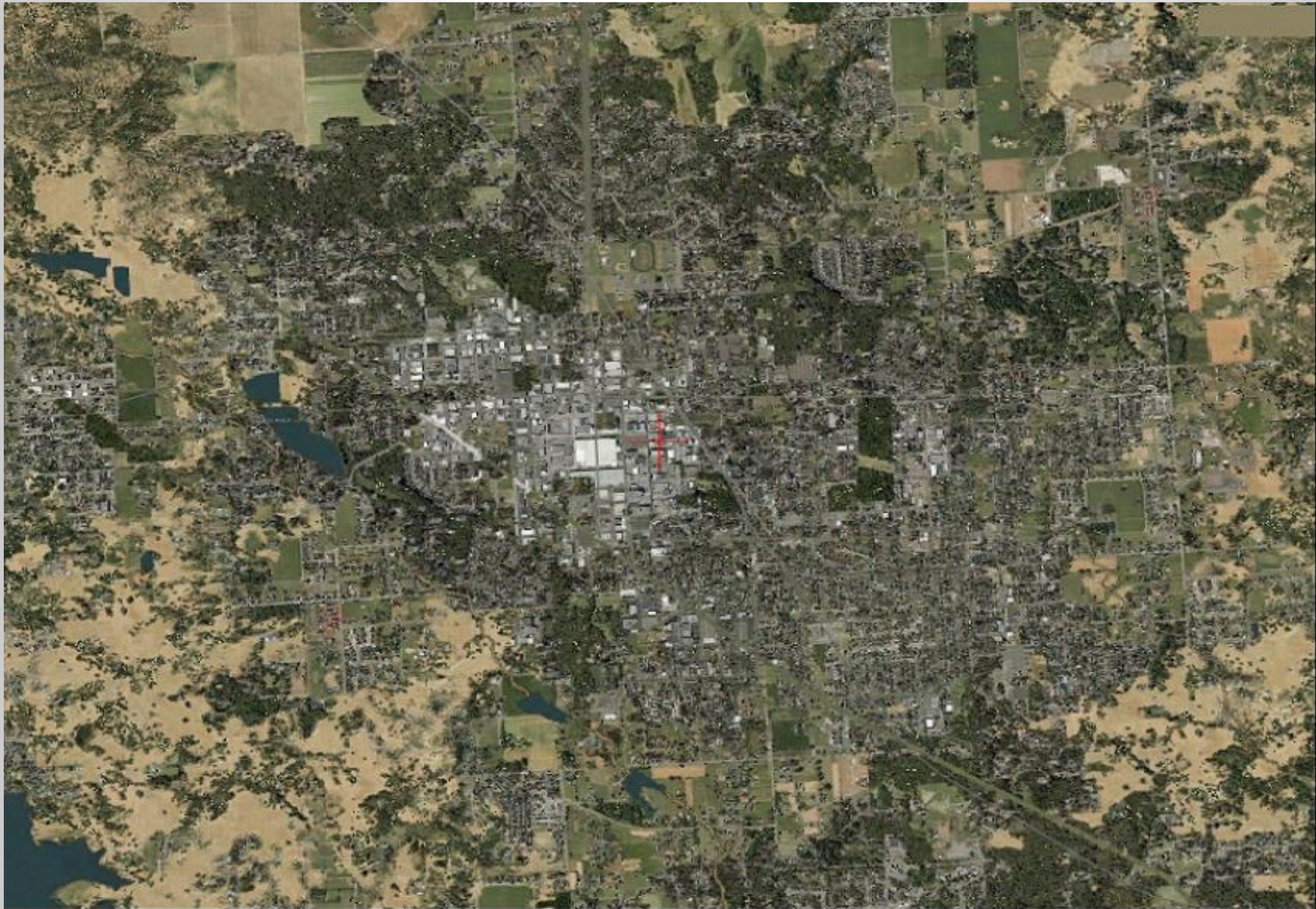
## Landclass – Hollister, California (FSX)



Most large metropolitan areas in FSX are represented with some kind of urban landclass texture. However, many small to medium-sized cities in FSX are not represented at all. Here is a top-down view of Hollister in FSX. The city is not present without a 3<sup>rd</sup> party landclass enhancement like *Ultimate Terrain X*.



## Landclass – Hollister, California (Ultimate Terrain X)



*Ultimate Terrain X* completely changes the look of Hollister, California. This type of improvement is typical of what you will see with nearly all of the smaller cities and towns with *Ultimate Terrain X*. You might also notice the presence of commercial activity in the *Ultimate Terrain X* screenshot, along with some missing water features.

# Custom Landclass Textures

In addition to using the many existing FSX landclass textures, *Ultimate Terrain X* now adds 6 new custom landclass texture types to enhance your cities and towns:

- zero-lot line housing
- university grounds
- multi-family housing
- commercial activity zones
- industrial sites
- shipping grounds

Each new landclass type includes full autogen support. So, the new textures will have buildings and vegetation placed on them where appropriate.

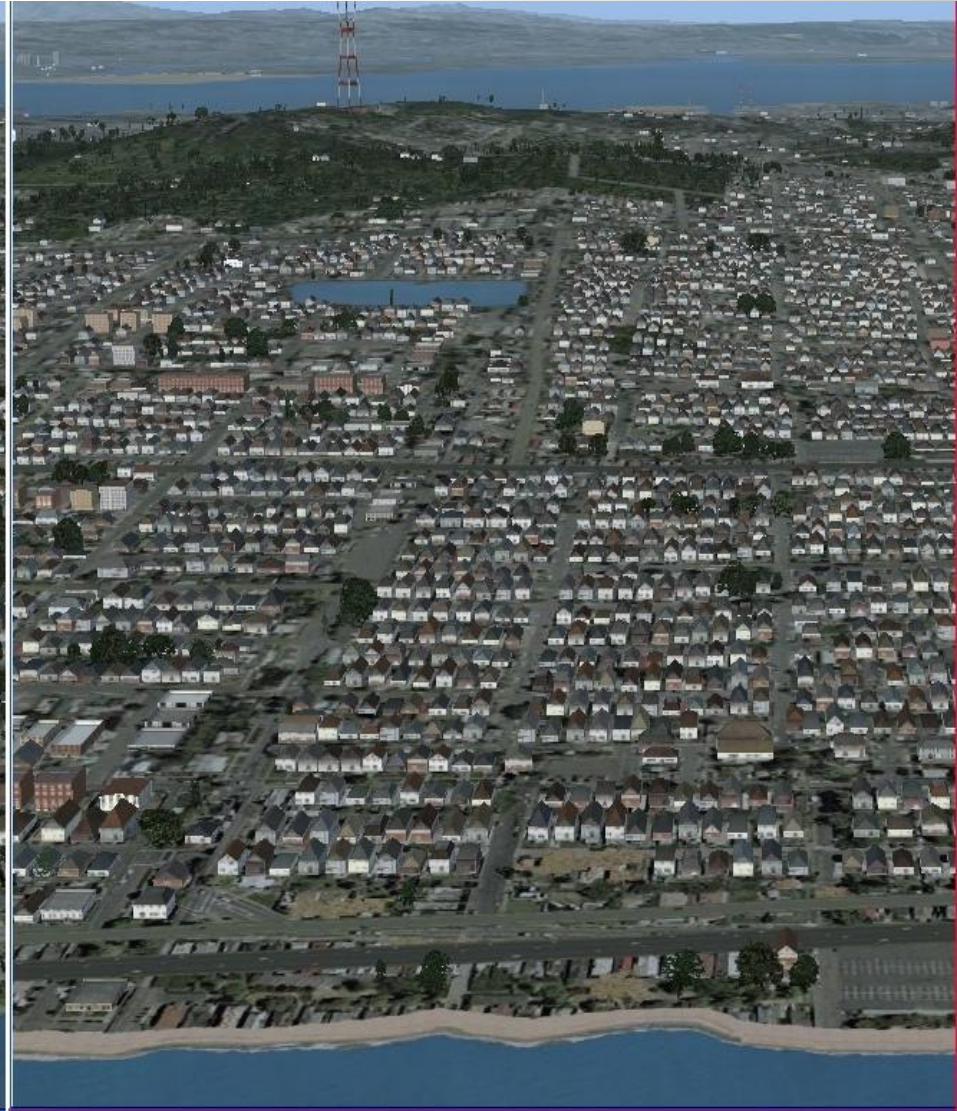


## Custom Landclass Textures – Zero Lot Residences

FSX



FSX with Ultimate Terrain X



*Ultimate Terrain X* adds a new zero-lot landclass texture (residences with little or no space between units). Zero-lot residences are frequently seen in the very large cities of the USA like San Francisco, Los Angeles, Chicago, New York and a few others. As you can see, the autogen buildings are more tightly spaced. In the image above, you can compare downtown San Francisco with and without the *Ultimate Terrain X* zero-lot landclass texture.



## Custom Landclass Textures – University Grounds



Large colleges and universities in *Ultimate Terrain X* are displayed using a new custom landclass texture, complete with autogen buildings.



## Custom Landclass Textures – Multi Family Housing



The new *Ultimate Terrain X* landclass includes multi-family housing where appropriate.



## Custom Landclass Textures – Commercial Activity



The new commercial activity landclass texture is an important part of *Ultimate Terrain X*. Large portions of the USA and other countries contain commercial activity districts. These areas are missing from FSX, except for a few commercial buildings that are nestled in with the residential landclass. The commercial building textures are similar to downtown, hi-rise areas in FSX. But, the buildings are typically shorter and wider to represent retail, warehouse and office space.



## Custom Landclass Textures – Industrial Sites



Aerial images from over 350 of the largest USA metropolitan areas were used to define the placement for many of the *Ultimate Terrain X* landclass features. Industrial sites in *Ultimate Terrain X* consist of industrial building autogen, which appears on top of an appropriate natural landclass texture.



## Custom Landclass Textures – Shipping Grounds



The last new landclass texture unique to *Ultimate Terrain X* is the shipping ground texture. The shipping ground textures most often appear next to coastal areas. But, they can also be found inland. As with all the new textures, appropriate autogen objects are added.

# Water Features

Anyone who is familiar with our *Ultimate Terrain X* product for FS9/FS2004, knows that our products use the absolute premium commercial water data available for each of our product regions. This water data is the most accurate and detailed data available at any cost.

In the major metropolitan areas, FSX has greatly improved the water body accuracy and details compared to FS9/FS2004. Outside of the metropolitan areas, there are still major missing water features and/or inaccurately positioned features. *Ultimate Terrain X* will add detailed water features throughout the entire covered region.

Our *Ultimate Terrain X* series of products uses the same quality of water data as our FS9/FS2004 products. And, this data is always tweaked and improved over time.

In addition to the quality source data, we have now enhanced our water features by adding more variety to the coastlines. Also, we have provided multiple waterclass options that will change the water color associated with lakes, rivers and oceans.

*Ultimate Terrain X* versions will also take advantage of our new "Radial Elevation Theory" algorithm, which allows for nicely channeled rivers that cut right through areas of extreme elevation changes. This new algorithm virtually eliminates the sloping water problems that are common with terrain hugging rivers.

# Water Polygons

Water features are drawn 2 ways in the MSFS series, which includes FSX.

The optimal way to draw water features is through the use of polygon data. With polygon data, lakes and rivers can be represented in their true size and shape, depending on the quality of the water data sources.

Another way to draw water features is through the use of textured line data. Textured line data can look nice. But, it can not match the precision of polygon data. Scenery developers call water features using textured lines "streams", even though rivers can also be represented this way.

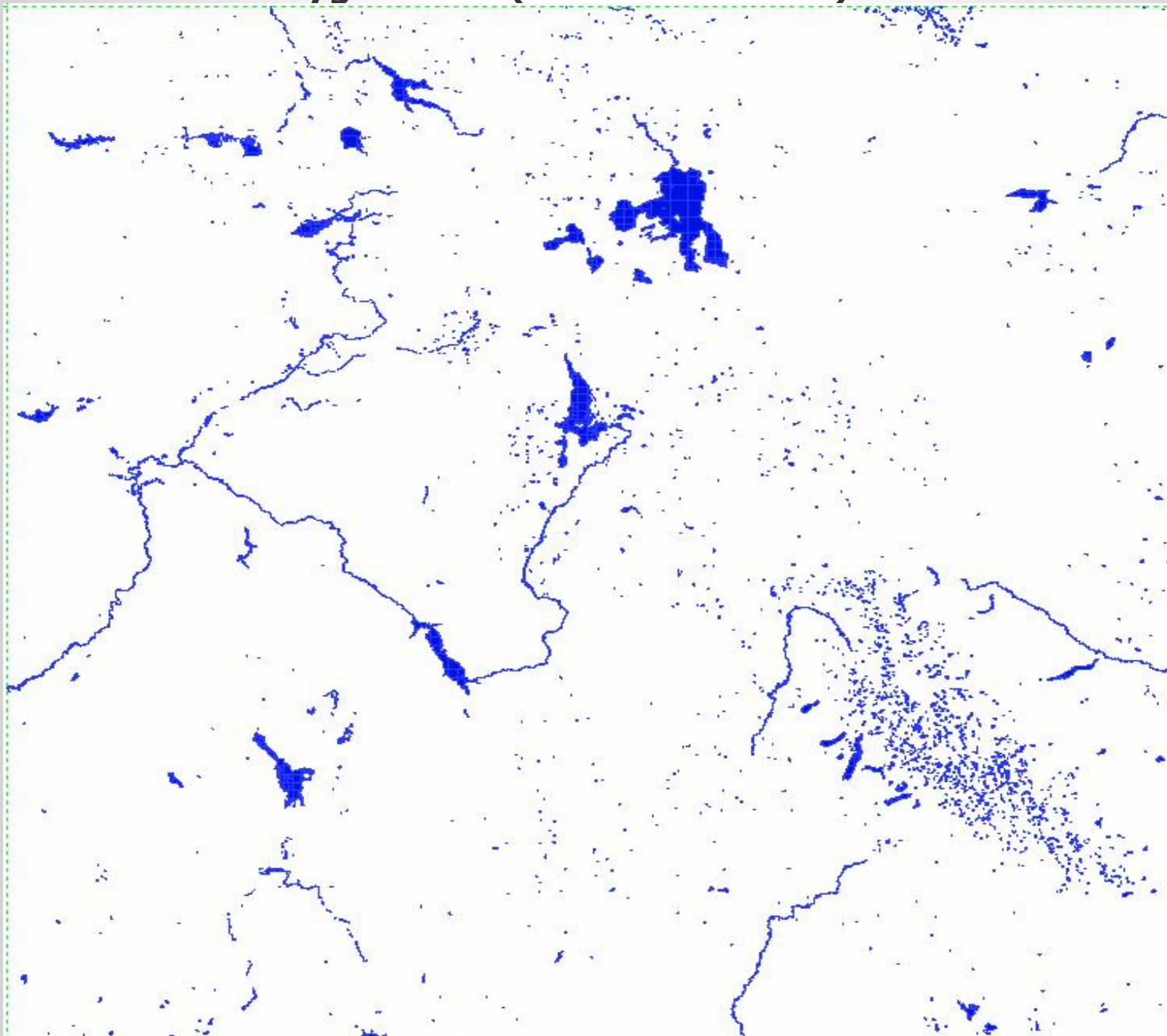


## Water Features: Water Polygon Data (FSX)



As we mentioned, the water polygon data in FSX is very accurate in the metropolitan city areas and important sites like national parks. However, outside the cities and areas of major importance, it can be sparse and/or poorly drawn. Here is the water coverage in FSX near Jackson Hole and Yellowstone NP. The National parks are well represented. But, the areas outside them are sparse.

## Water Features: Water Polygon Data (Ultimate Terrain)



Here is the same water polygon coverages for the water polygon features in Ultimate Terrain X. The FSX water features are improved over previous versions of MSFS. But, the Ultimate Terrain X features are a big improvement the entire USA coverage region.



## Water Features: Lower Bear Reservoir (FSX Without Ultimate Terrain X)



For comparative purposes, here is Lower Bear Reservoir in FSX. Lower Bear reservoir is a medium-sized lake. But, it is not represented in the FSX data set. Also, there are no roads to represent this part of California.



## Water Features: Lower Bear Reservoir (FSX with Ultimate Terrain X)



Here is Lower Bear Reservoir with *Ultimate Terrain X*. In addition to the reservoir, streams and roads are also present.



## Water Features: Ultimate Terrain X River Flattening



This image (Snake River and Palasaides Reservoir) shows the new river flattening logic in *Ultimate Terrain X*, which is based on our new "Radial Elevation Theory" algorithm. This algorithm allows rivers to retain their gradual downstream sloping nature, without the severe "hill climbing" characteristics often found in terrain hugging (mesh clinging) rivers.

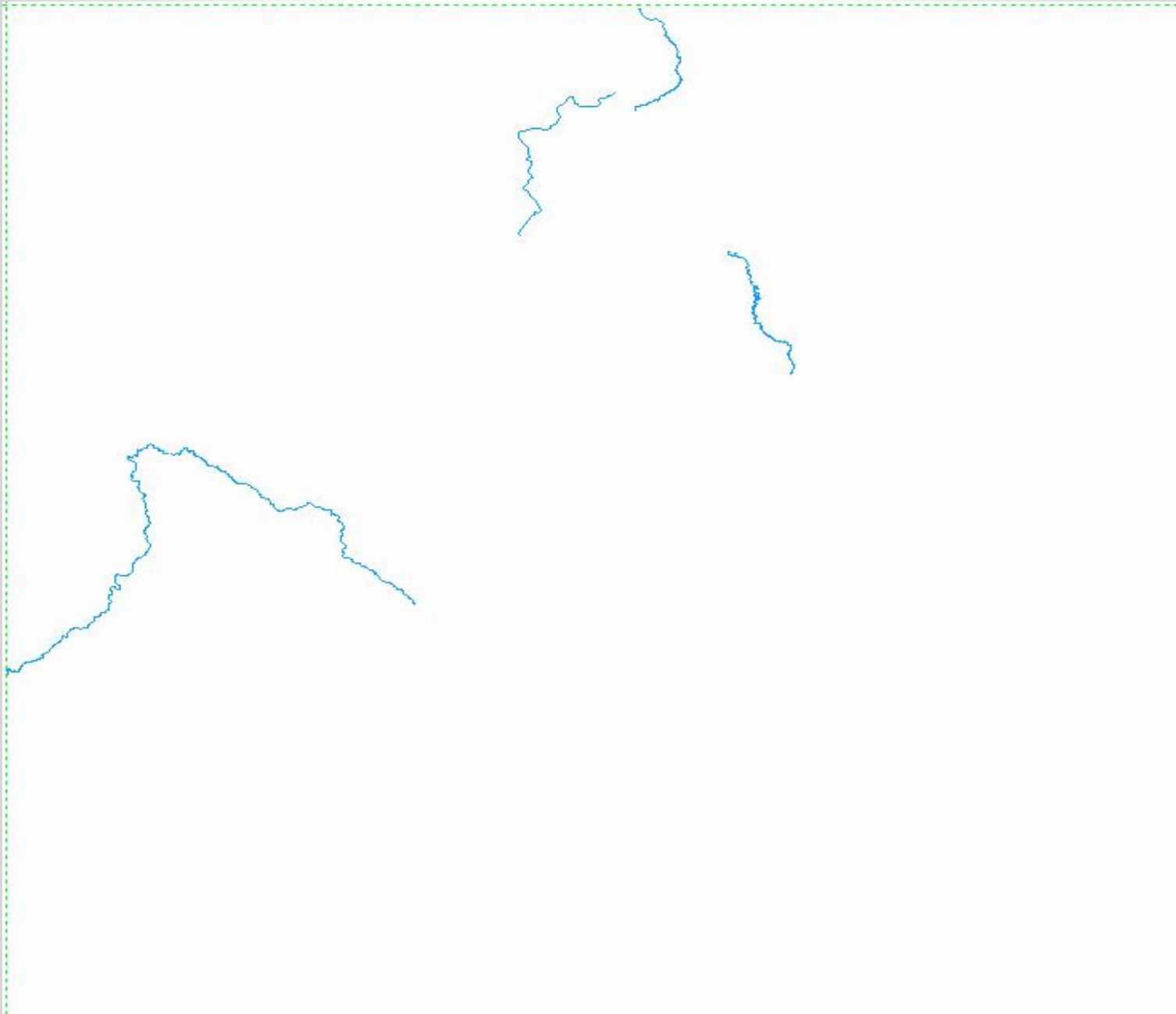
# Streams

As mentioned previously, streams and some small rivers in FSX can be represented using textured line data. Textured line data looks nice. But, the widths of the water features are not variable. So, while the water features may be accurately positioned, the coastlines and widths of stream features will not be accurate.

For the most part, streams have been left out of FSX, because they do not exist in the source data. However, *Ultimate Terrain X* provides a huge amount of stream data.



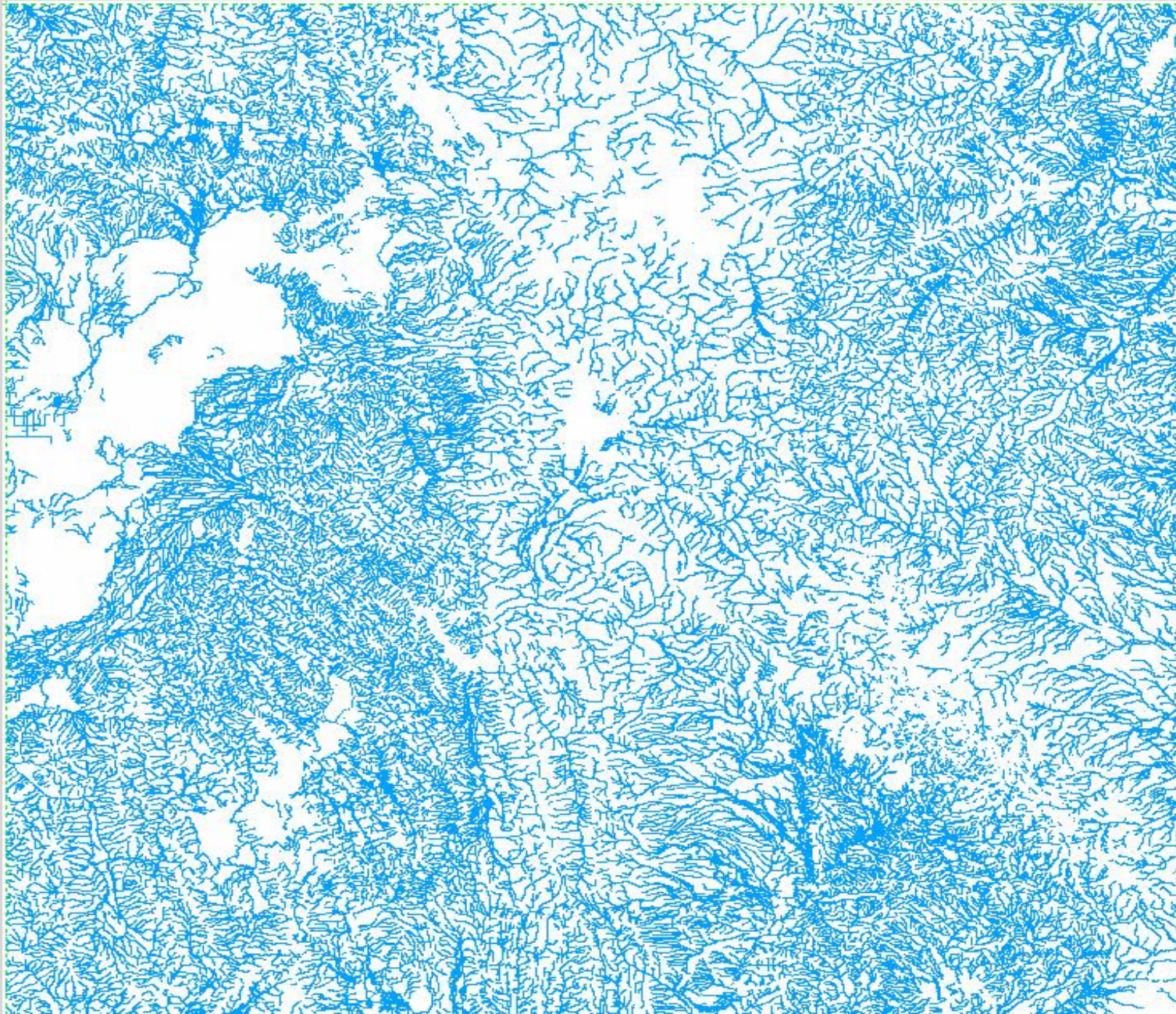
## Water Features: Stream Data (FSX)



Here are the streams and small river coverage for the same Jackson Hole and Yellowstone area in FSX. This area actually has a ton of streams and rivers that are left out of FSX.



## Water Features: Stream Data (Ultimate Terrain)



This is the same large area showing the number of streams provided by *Ultimate Terrain X*. The *Ultimate Terrain X* streams are divided into 2 categories: Named streams and rivers, and unnamed streams and rivers. Many users may want to disable the unnamed streams. Or, you can apply a dry texture to them to represent non-perennial water features.



## Water Features: Stream Example (FSX)



This area in FSX should have a small river named Grey's river displayed. Also, there are some small roads in the area.



## Water Features: Stream Example (FSX with Ultimate Terrain X)



Here is Grey's river in *Ultimate Terrain X*, with an access road running along the side of it. The *Ultimate Terrain X* streams will add a lot to your environment, especially in the rural areas.



# Coastlines

Coastlines are special textures that blend in the edges of the water bodies with the land. In addition to the standard coastline textures in FSX, *Ultimate Terrain X* takes coastlines to a whole new level, by including higher resolution rocky coastline textures, sandy beaches, concrete piers, freshwater dams, and man-made breakers.

All oceanic coastlines have been classified by hand to give them a more appropriate look.

The sizes of the coastline features are scaled to correctly represent the area in question.

## Coastlines: Sandy Beach Coastline



Here is the new beach coastline in *Ultimate Terrain X*. Many of our beach areas are enhanced with special beach polygons. The beach polygons will allow the beaches to take on their real-world size and shape. The beach polygons blend in perfectly with the beach coastlines.

An example of the beach polygons is coming up later in the slideshow.



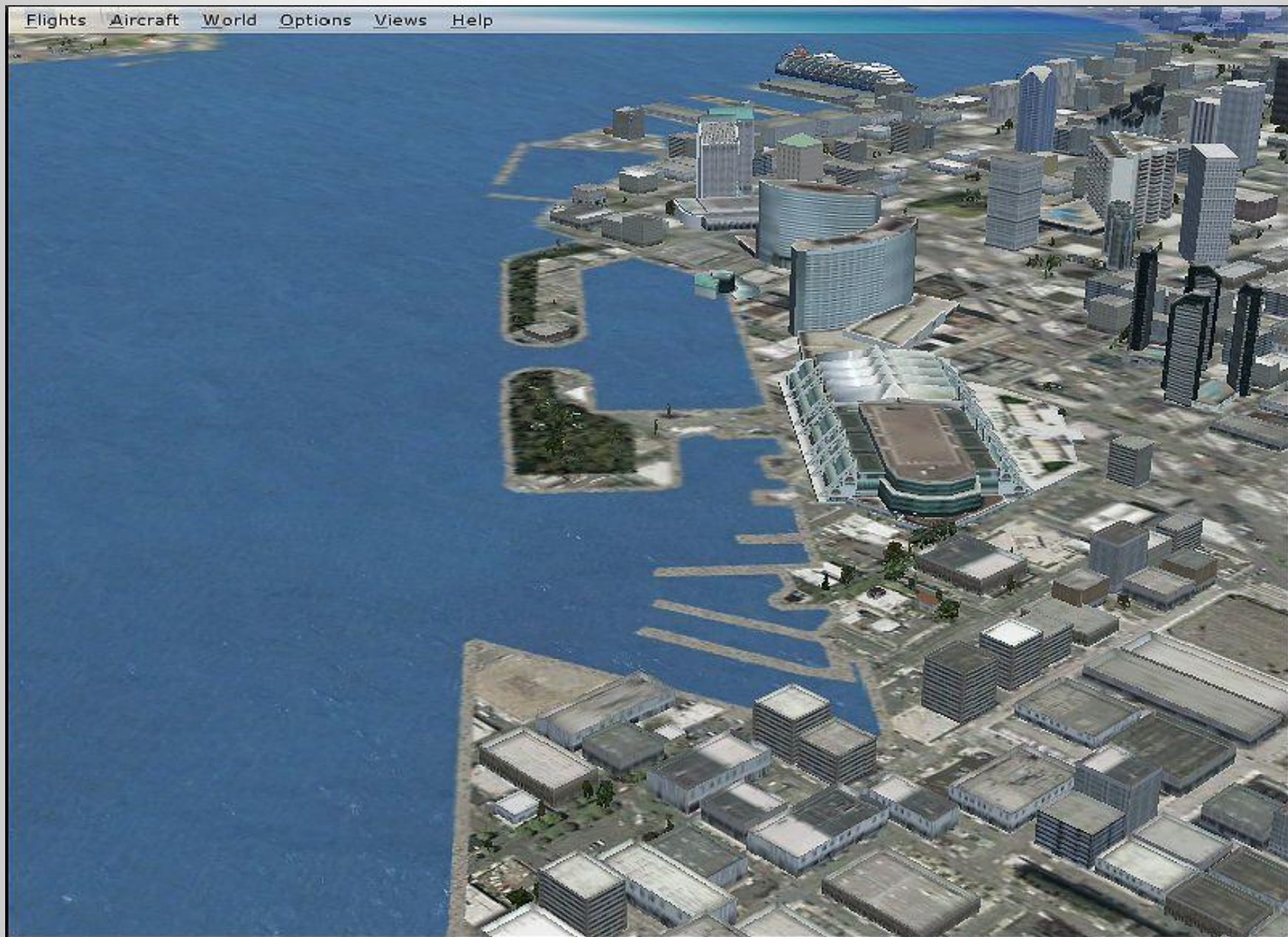
## Coastlines: Rocky Shore Coastline



Here is the new rocky shoreline texture used in *Ultimate Terrain X*.



## Coastlines: Concrete Pier Coastline



Boat docks and piers in *Ultimate Terrain X* are displayed using a concrete pier texture.



## Coastlines: Lake And River Coastlines

UT Lake Coastline



UT River Coastline



Lakes and rivers in UTX are displayed using a special texture. The width of the coastline is appropriate for the size of the particular water feature. Larger lakes will have wider coastlines. Small rivers will have smaller coastlines.



## Coastlines: Freshwater Dams



Freshwater dams areas are given special treatment in *Ultimate Terrain X*. There are over 650 lakes in UTX that have the dam areas depicted this way.



## Coastlines: Coastline Transitions



Another important coastline aspect of *Ultimate Terrain X* is the coastline transitioning. The coastlines have been designed so that appropriate coastlines appear in appropriate locations with appropriate sizes.

In this image, note the transitioning of beach textures to inland water textures.

# Waterclass

Waterclass in FSX controls the coloring and style of the water features for various locations around the world. FSX enhances the look of it's water over FS2004, by using 60 different waterclass textures and by providing great new water effects.

Without *Ultimate Terrain X*, FSX waterclass provides very blue water for nearly all of the USA salt and freshwater areas.

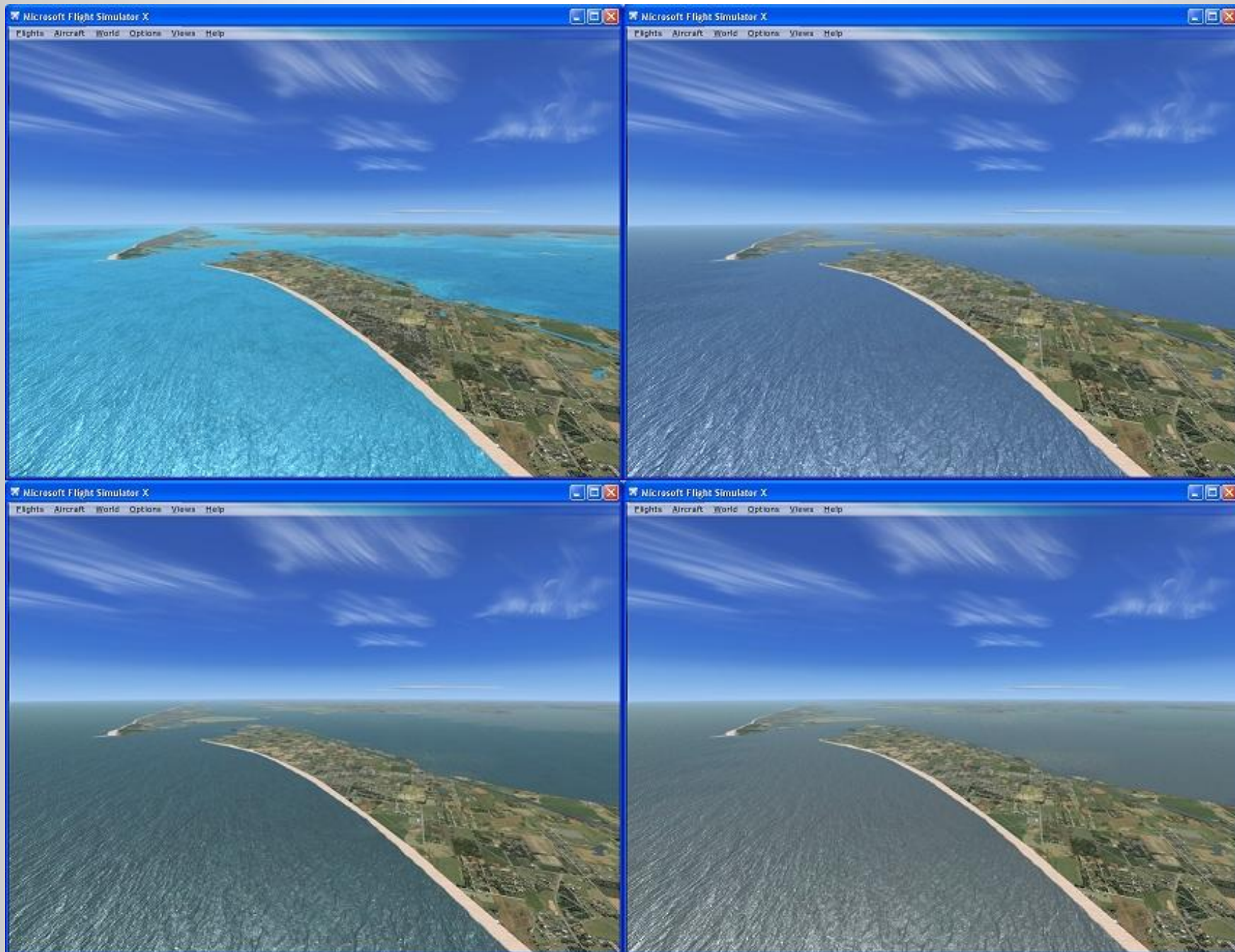
Ultimate Terrain enhances the FSX water even more by providing 4 different waterclass choices:

- Blue water tint
- Plankton/Algae bloom tint
- Muddy water tint
- Muddy water with Plankton bloom tint.

Water colors can vary dramatically between seasons. And, many users have different opinions on how their water environment should look. So, *Ultimate Terrain X* gives you several choices.



# Waterclass: Galveston Bay Comparisons



Here is a comparison shot showing Galveston Bay and the Gulf Of Mexico. Without *Ultimate Terrain X*, this area is shown using tropical water textures (upper-left image). With *Ultimate Terrain X*, you have several different choices to better match the actual coloring of the Gulf Of Mexico: Darker blue tint (upper-right), Green tint from plankton/algae (lower-left) and muddy tint (lower-right).

# Roads

The FSX roads are a big improvement over FS9 (FS2004). However, *Ultimate Terrain X* takes the roads one step further, by providing all the available road types from the Tele Atlas commercial data set, instead of just highways and most major roads.

The *Ultimate Terrain X* road textures are also very high resolution, matching the 1 meter landclass textures currently in FSX.

Having improved road textures is nice. But what really make our roads stand out, is the attention to detail, using road encasements and custom ground polygons for the interchange areas.

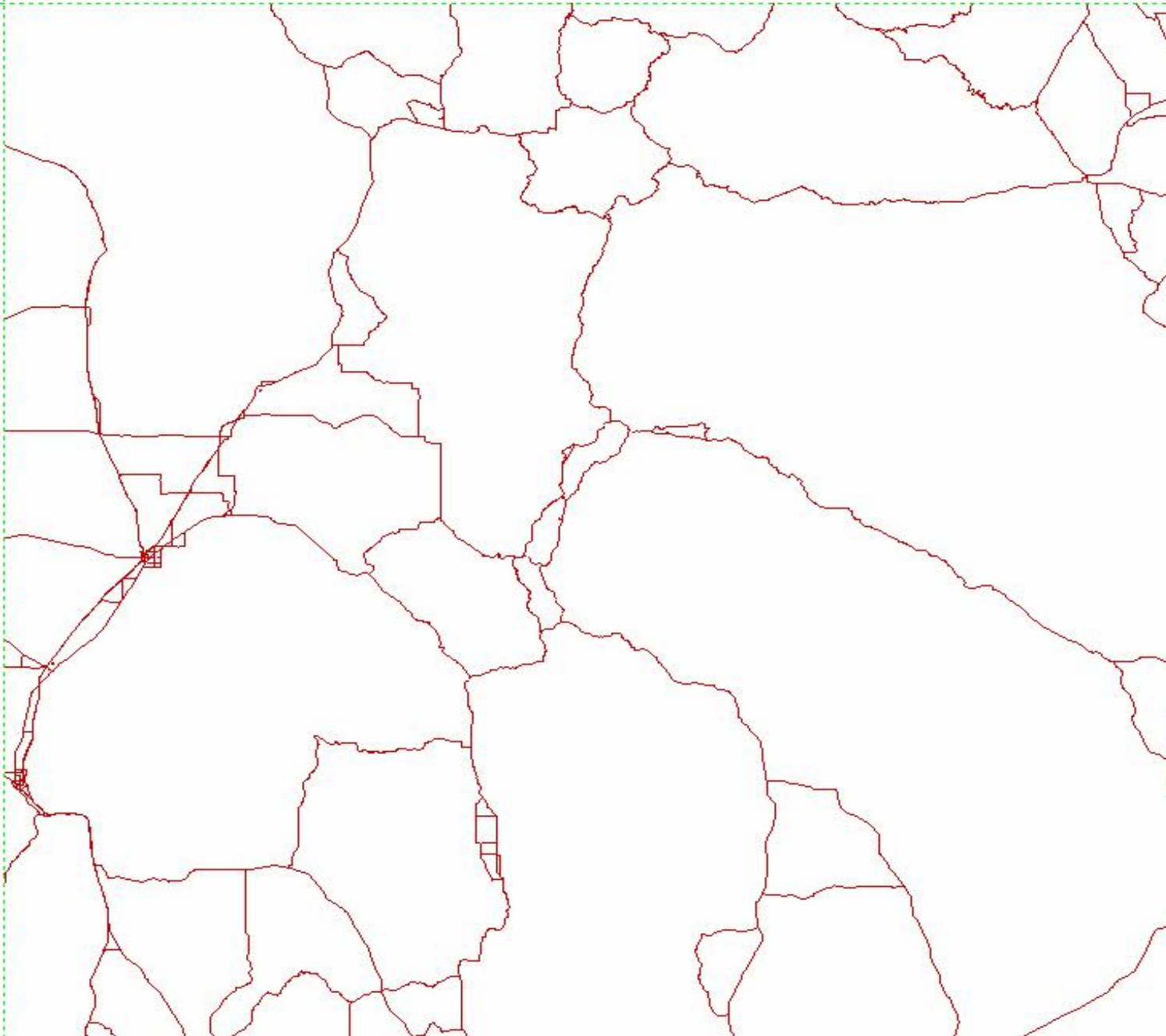
For every major road and highway that crosses a water feature in *Ultimate Terrain X*, a 3D extrusion bridge is displayed. There are thousands of these bridge features in the USA alone.

If you like the look of the moving road traffic in FSX, you will love the moving traffic in *Ultimate Terrain X*. *Ultimate Terrain X* greatly expands the moving traffic coverage areas in FSX.

We even include dark tunnel entrances for those tunnel roads that disappear underground.



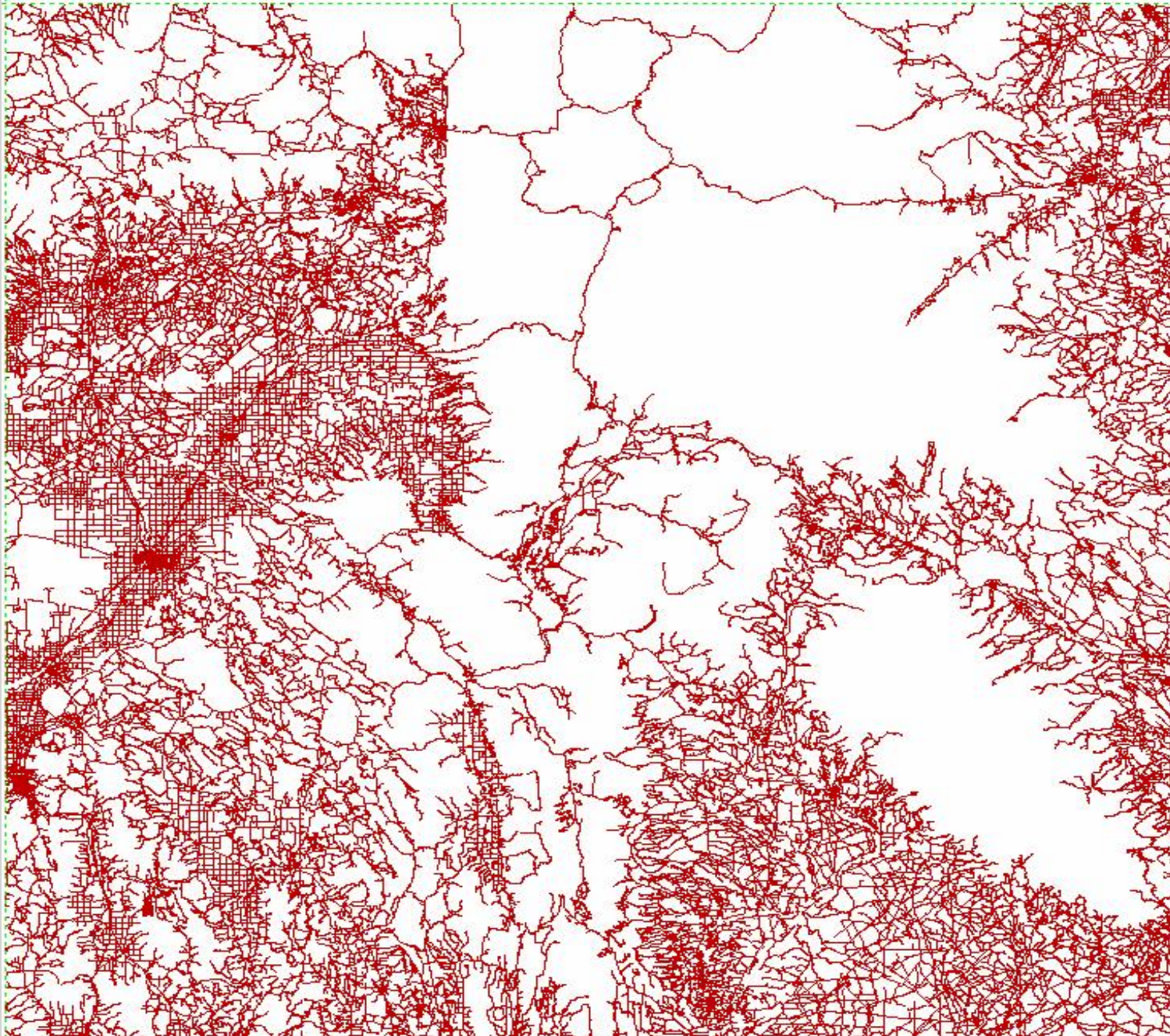
## Roads: Road Data (FSX Without Ultimate Terrain X)



The road coverage in Flight Simulator X is far superior to previous versions in accuracy. However, it only includes freeways, highways and most major roads. This image shows a map of all roads in FSX for a large region.



## Roads: Road Data (Ultimate Terrain X)



Here is the same region with *Ultimate Terrain X*. Most users will choose to turn off the minor roads in the urban areas, because excessive amounts of roads in cities can clash visually with the landclass textures and their faux roads. However, outside of the urban areas, minor roads are very important. **Ultimate Terrain X** contains all the available roads in the USA, including minor and/or residential roads.



## Roads: Interchanges And Road Encasements (Aerial Image)



The urban landclass textures in FSX are both high resolution and beautiful. However, the landclass textures contain faux roads embedded in the actual textures. The faux roads look nice. But, they are just randomly placed road textures that have no real-world accuracy.

Many sim-pilots use the roads for VFR flight. So, it is important that the major roads stand out against the terrain as they often do in the real-world.

In the real-world, major roads and highways stand out from the terrain because the roads are often surrounded by grassy road encasements. Interchanges are most often surrounded by grass, shrubs or trees. The aerial photograph image above demonstrates this phenomena.

*Ultimate Terrain X* adds encasements and interchange textures to surround the major divided roads and highways. This can make a huge difference in the urban road appearances as you will see.



## Roads: Interchanges And Road Encasements (Ultimate Terrain X)



The image above demonstrates the use of encasements and interchange textures in Ultimate Terrain X. The addition of seasonal road encasements and interchange textures allow the roads to look more natural in the urban areas. Over 3,500 hand-drawn interchanges are included in *Ultimate Terrain X*. The road textures in *Ultimate Terrain X* are also more crisply drawn, with a resolution 4x higher than the road textures currently available in FSX.



## Roads: Extrusion Bridge Objects



Every major road and highway, that crosses water in Ultimate Terrain X, is given an extrusion bridge object. Our extrusion bridge algorithm results in fewer “broken” bridge segments, which occur when road segments start and stop in or near the water’s edge. The 3D extrusion bridge objects match our road segments perfectly at the bridge entrance and exits.



## Roads: Animated Road Traffic



The moving automobile traffic in FSX is a nice touch. In FSX, this traffic is limited to divided freeways only. Ultimate Terrain adds much more moving traffic to FSX. In fact, there is traffic defined all freeways, highways and major roads. We have also added moving traffic support to undivided roads. Undivided road traffic is not yet even supported by the FSX SDK. So, this is a feature unique to *Ultimate Terrain X*.



## Roads: Tunnel Entrances



A nice touch to our road support includes the use of dark tunnel entrances. Normally, roads just start and stop at tunnels, giving the user the appearance of a broken road segment. *Ultimate Terrain X* clearly marks these areas as tunnels.

# Railroads

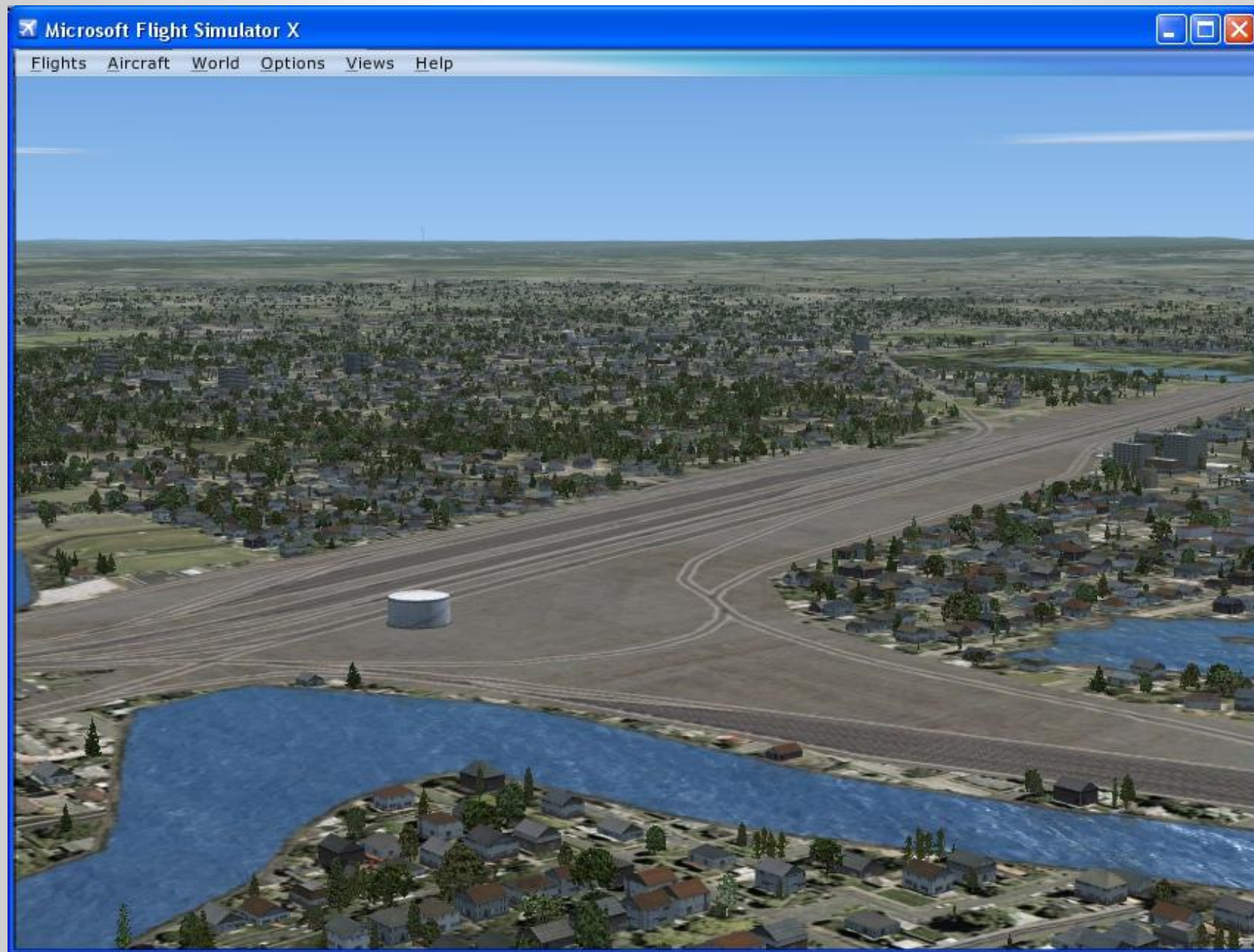
Railroads in *Ultimate Terrain X* are similar in precision to those already in FSX. Ultimate Terrain's railroads are based on the commercial Tele Atlas railroad data set.

While the data quality in *Ultimate Terrain X* is similar to FSX, we improve the look of railroads using higher resolution textures, railroad track encasement textures, railyard ground textures and tunnel entrances.

A 3D bridge object will be placed where all railroad tracks cross water.



# Railroads: Railyards



Ultimate Terrain X railroad tracks and railyard.

# Night Lighting

If you purchased our previous Ultimate Terrain products, you know that our night lighting is a unique feature in this hobby.

*Ultimate Terrain X* night lighting consists of points of light that represent things like street lights, intersection lights and vehicle lights.

In *Ultimate Terrain X*, the night lighting has been created with two things in mind:

- Provide brighter lights against the very bright FSX background.
- Prevent autogen reduction.
- Eliminate the occasional “floating light” situation from differing mesh products.



## Night Lighting: Street Lights



*Ultimate Terrain X* street lights always appear at a fixed point above the terrain, regardless of the terrain mesh that is installed. Also, there is no reduction of autogen with the new lighting scheme.



## Night Lighting: Street Lights With Intersection Traffic



You also have the option of adding simulated auto headlights and taillights to major road intersection areas.



# Special Ground Textures

*Ultimate Terrain X* includes many custom ground textures. These ground textures differ from landclass, because they take on the exact size and shape of the terrain feature in the real world.

In FSX, special ground textures are already used for city parks and golf courses.

In addition to the parks and golf courses, *Ultimate Terrain X* provides many other ground polygon features that are unique to *Ultimate Terrain X*.

- Beaches
- Glaciers
- Cemeteries
- Highway Interchanges
- Tunnel Entrances
- Railroad Yards
- Small Islands
- Parking Lots
- Grassy, Forest or Concrete areas for landmark features.

## Special Ground Textures: Beaches



*Ultimate Terrain X* displays sandy beaches using sandy beach coastlines and with matching sandy beach polygons. Coastlines in FSX are a fixed width. Combining the beach coastline with a beach polygon allows the beaches to take on an a more accurate real-world appearance. *Ultimate Terrain X* provides over 1,400 hand-drawn beach areas, from satellite images, to match the sandy coastlines. These beach polygons accurately reflect the actual size and shape of the areas they represent.



## Special Ground Textures: Cemeteries



Ultimate Terrain X cemeteries use a custom texture, similar to the city park textures in FSX (but with one obvious difference).



## Special Ground Textures: Small Islands



Islands in FSX always take on the nearest landclass texture. Because landclass is only accurate down to 1km, small islands in urban areas can mistakenly end up with buildings or urban textures on them. For these situations, *Ultimate Terrain X* replaces the urban island texture with a more appropriate grass, shrub or dirt texture.



# Special Ground Textures: Assorted Forest And Grass Areas



*Ultimate Terrain X* contains precise forest and grass textures for special areas of significance. Here is the National Mall area in Washington D.C.



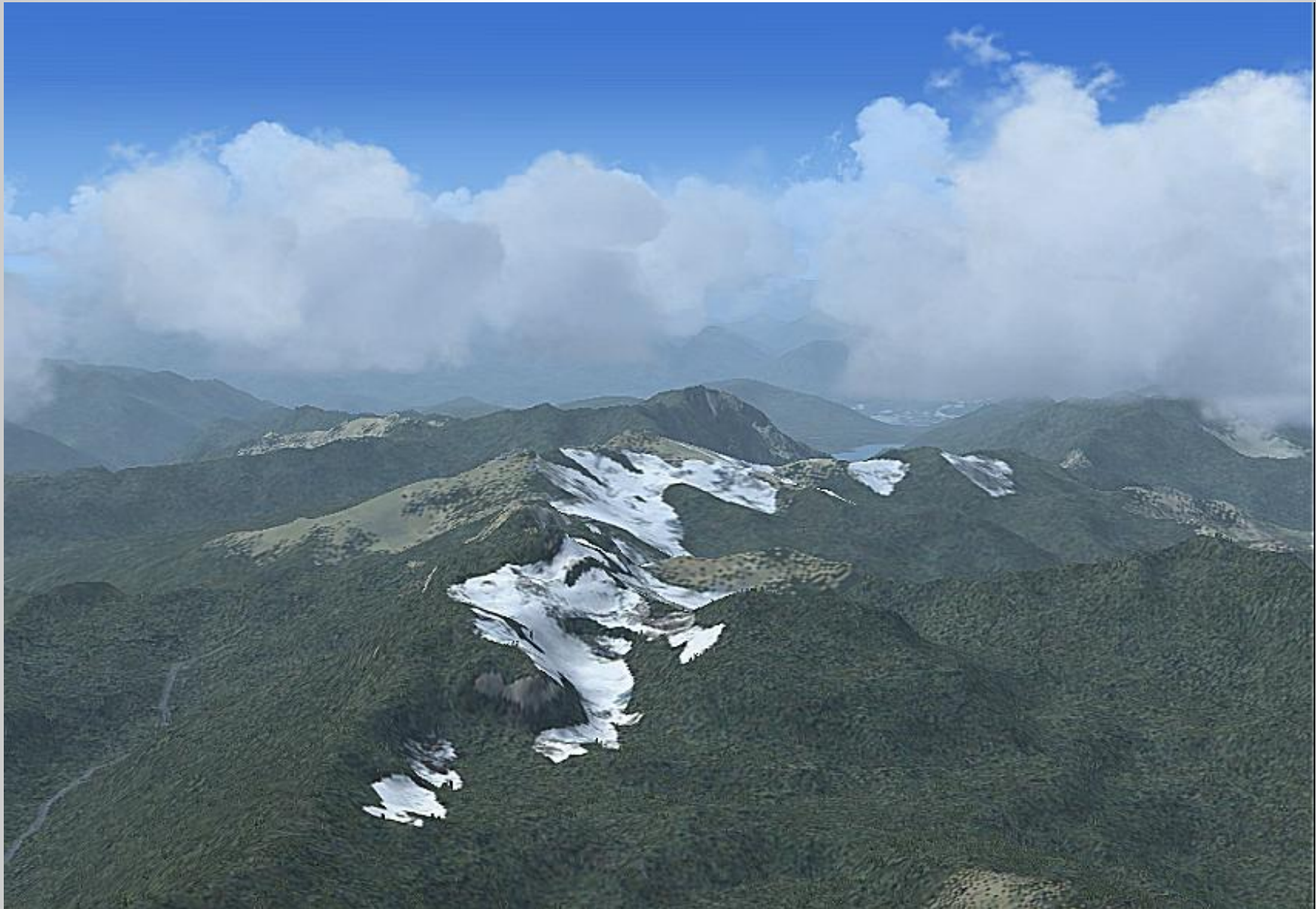
## Special Ground Textures: Parking Lots



*Ultimate Terrain X* contains thousands of precise parking lot textures.



## Special Ground Textures: Glaciers



As per special request, *Ultimate Terrain X* now contains glaciers. Unlike ice landclass textures, glaciers maintain their actual shape and location. They blend great with high resolution mesh, usually filling in the nooks and crannies of the terrain, just like the real-world.

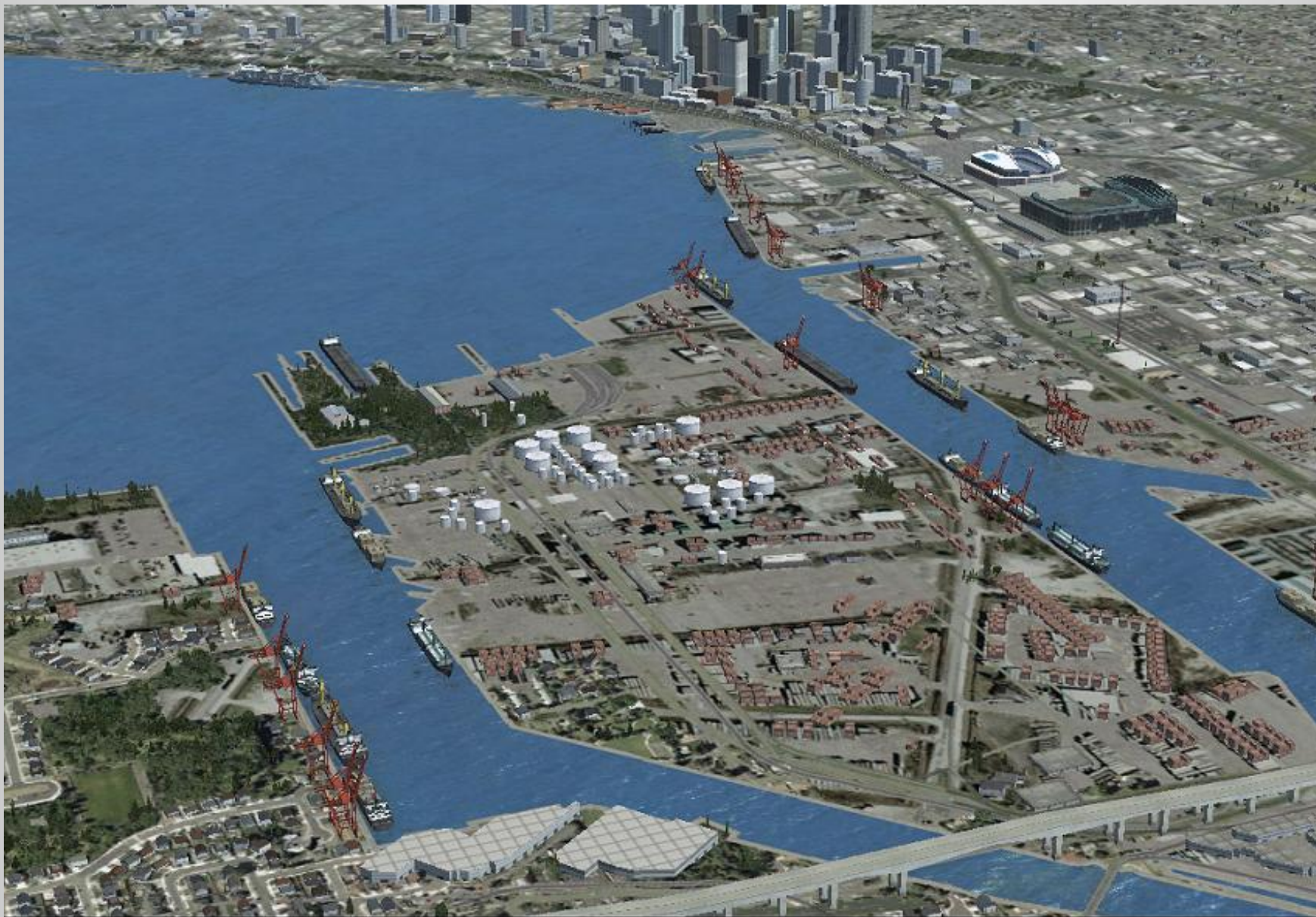
\* Thanks to Holger Sandmann for his assistance with the Glaciers.

# Object Repositioning

To make sure that the current custom FSX objects line up with the *Ultimate Terrain X* scenery, we have repositioned any objects, as necessary, to better align with the *Ultimate Terrain X* road and water features. This includes things like buildings, ships, docks, buildings and custom bridge objects (i.e. the Golden Gate Bridge).



## Object Repositioning: Seattle



In order to better align with the *Ultimate Terrain X* coastlines, ships and other harbor features have been repositioned as in this example.

# The Ultimate Terrain X Setup Tool

We know that a great number of Flight Simulator enthusiasts like to tweak their environments to meet their own personal expectations and needs. As a result, *Ultimate Terrain X* was designed from the ground up, to provide a near total configurable environment.

Advanced users will marvel at the fact, that they can have different textures assigned to nearly every Ultimate Terrain feature. For example, you can change the sizes of things like stream widths, road widths and coastline widths using the new *Ultimate Terrain X* Setup Tool.

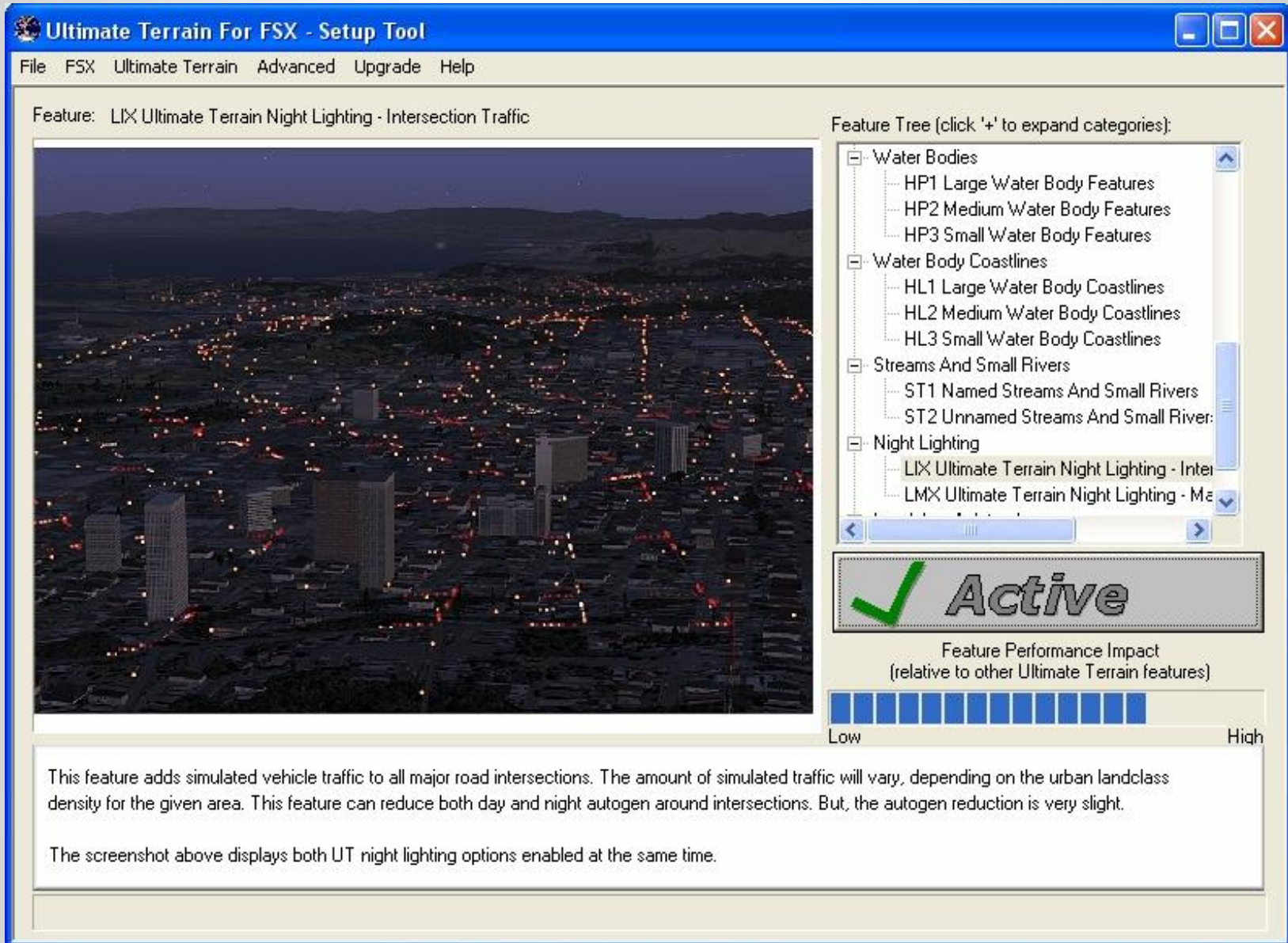
The new setup tool also allows novice users to get up and running quickly.

No actual configuration steps are needed. A graphical environment helps users understand the basic individual features that are available.

The next few screenshots will demonstrate just a few things you can do with the new setup tool.



## Setup Tool: Main Interface



The new *Ultimate Terrain X* Setup Tool contains visual aids to help you understand the various Ultimate Terrain X features that are available. Each time a different *Ultimate Terrain X* feature is selected in the "Feature Tree", a new screenshot is displayed to help you understand exactly what the feature provides, along with an appropriate text description at the bottom of the window. A button will tell you whether the feature is currently active (turned on) or inactive (off). You can change the active status by simply clicking on the button. A performance bar indicates the potential performance impact that activating the feature will have on overall FSX performance, relative to other *Ultimate Terrain X* features. *Ultimate Terrain X* overall is very efficient and should not impact performance more than the default FSX environment. The additional 3D objects, such as the night lighting and increased roads with traffic, can impact performance. But, these features can be adjusted to suite your personal performance needs.

## Setup Tool: FSX Settings

**Internal FSX Settings That Can Effect Ultimate Terrain Performance**

**Terrain**

Global Texture Resolution: Very High

Texture Resolution: 1m

Level Of Detail Radius: Medium

Mesh Complexity: 100

Mesh Resolution: 38m

Water Effects: High 1.x

☒ Land Detail Textures

**Scenery Objects**

Scenery Complexity: Extremely

Autogen Density: Normal

Special Effects Detail: Medium

☒ Ground Scenery Shadows

**Traffic**

Airline Traffic Density (%) 20

General Aviation Traffic Density (%) 20

Airport Vehicle Density (%) 5

Road Vehicles (%) 15

Ships And Ferries (%) 15

Leisure Boats (%) 11

**Graphics (Advanced Settings)**

Target Frame Rate 0 Assist

Fibre Frame Time Fraction (0.1 - 0.9) 0.33 Assist

Texture Bandwidth Multiplier 0 Assist

**Overall Performance Load Indicators (Frame Rate Impact, Includes Ultimate Terrain Feature Activation Status)**

Low Day Scenery High

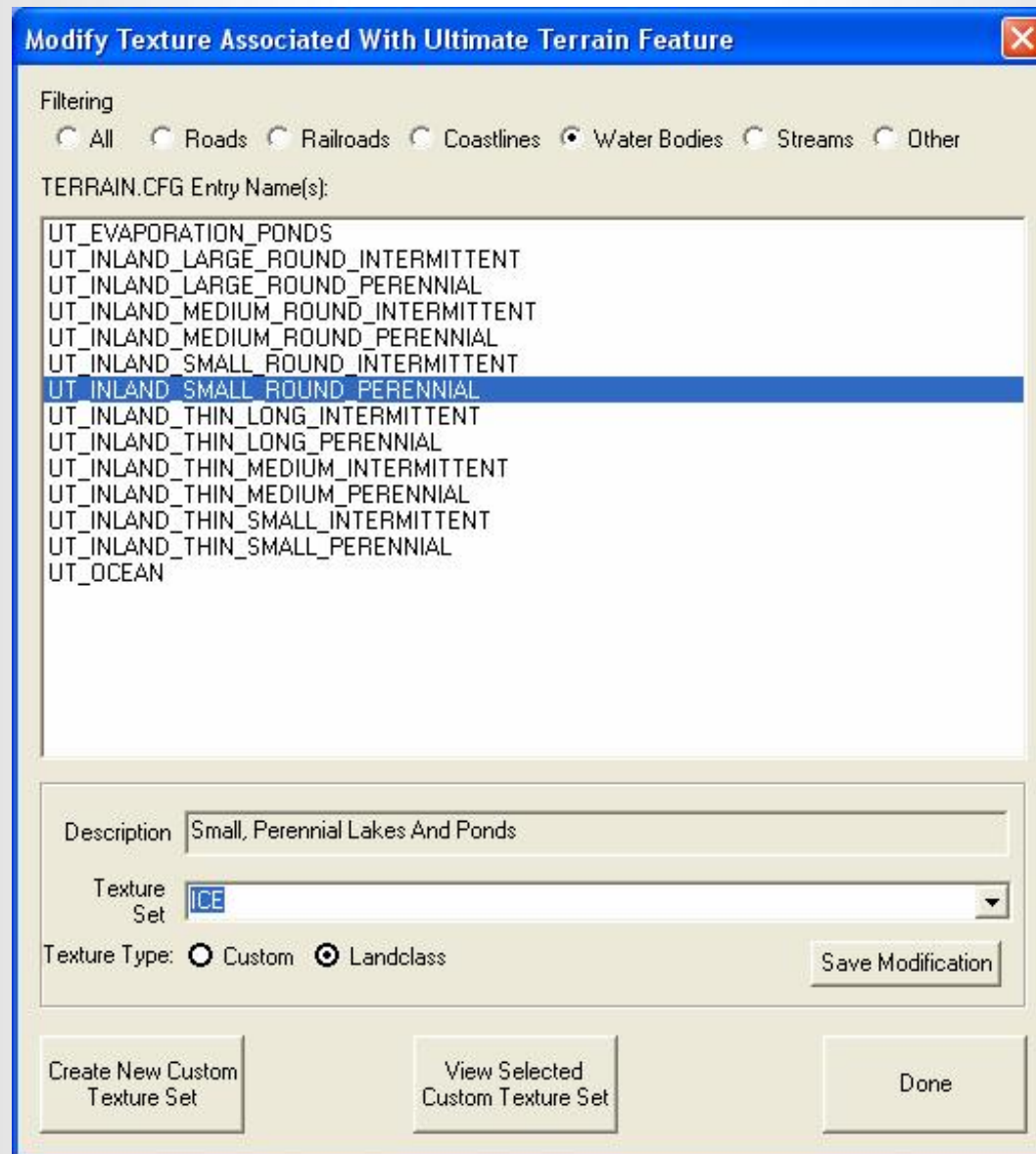
Low Night Scenery High

Update & Exit Update Only Exit

The new setup tool now allows you to modify many scenery related FSX settings outside of FSX. After making the changes, a performance bar will give you a rough indication on the expected impact of the new settings on overall FSX performance.



## Setup Tool: Advanced User Features



Advanced users will love the “tweakability” built into the *Ultimate Terrain X* Setup Tool. You can define your own texture sets and assign them to almost any *Ultimate Terrain X* feature. Do you want to flatten certain types of roads but not others ? This is easy with the new setup tool. Want to change the width of the ocean coastlines ? You can quickly do this with the setup tool How about assigning different textures ?

Do you want frozen lakes in the winter ? In the example above, we are replacing the water texture associated with small, perennial lakes and ponds, to an ice texture. The next time you start FSX, all small lakes will be iced over. Creative users will have nearly complete control over their FSX scenery environment.

# Before/After Shots

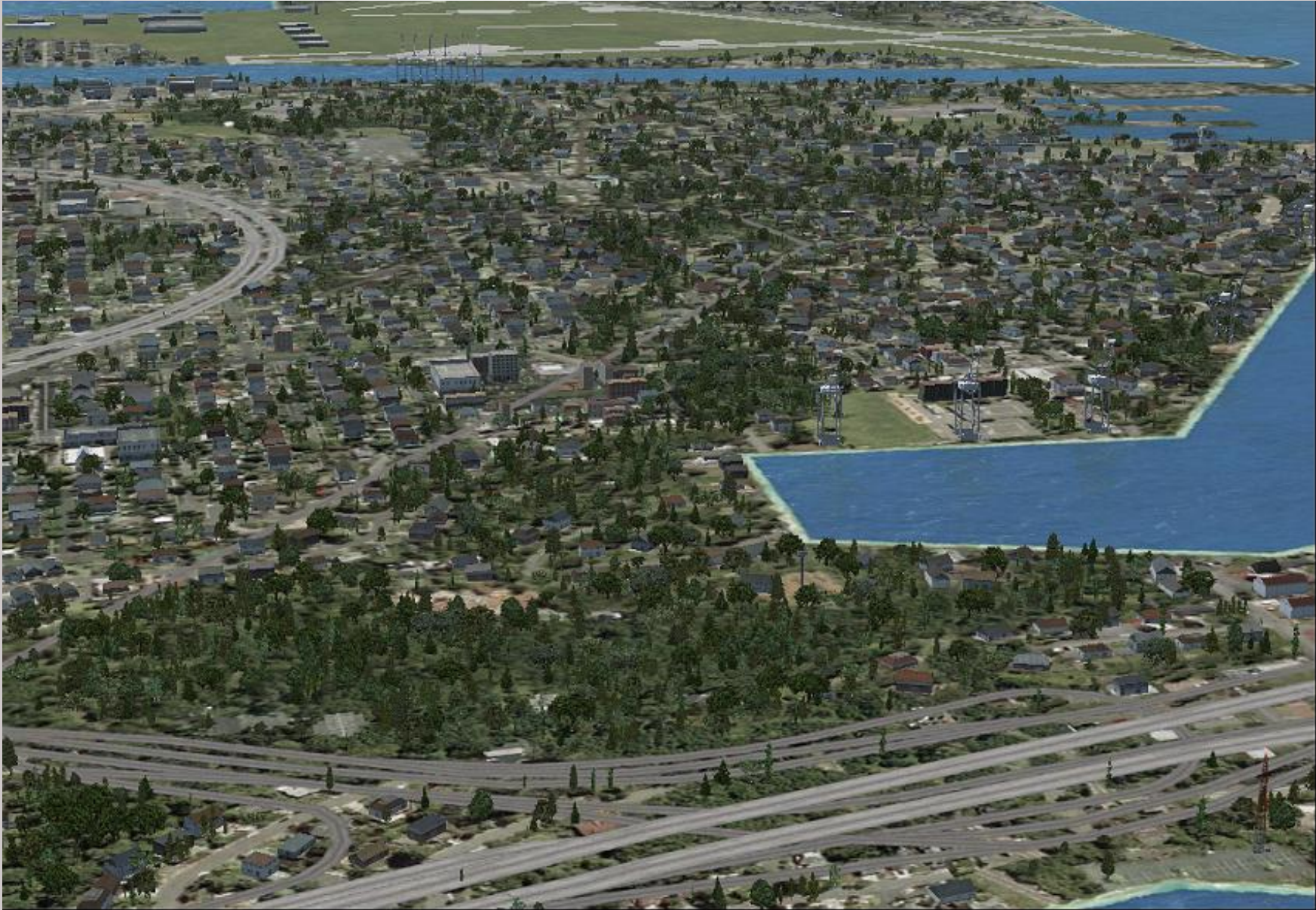
We will end this presentation with a series of shots before and after adding *Ultimate Terrain X* to FSX.

Even though these screenshots only show a few specific examples, the impact of Ultimate Terrain X will be seen across the entire USA region.

As with any Ultimate Terrain product, we start with the best possible commercial grade source data available and improve upon it even more as needed. You can be sure that you are getting a quality product that is the best in it's class.



## Scenery Comparison 1: Oakland California Shipping Grounds (FSX Without Ultimate Terrain X)



In FSX, the shipping grounds in Oakland are normally displayed as residential landclass.



## Scenery Comparison 1: Oakland California Shipping Grounds (FSX with Ultimate Terrain X)



*Ultimate Terrain X* adds the shipping grounds and autogen to the same area.



## Scenery Comparison 2: Texas Stadium, Irving Texas (FSX Without Ultimate Terrain X)



Irving, Texas and Texas Stadium *before Ultimate Terrain X*.



## Scenery Comparison 2: Texas Stadium, Irving Texas (FSX With Ultimate Terrain X)



There are many Ultimate Terrain X enhancements visible in this image. In real-life, this area has lots of commercial activity which is displayed by the custom UTX landclass features. The interchanges and road encasement textures are used to correctly buffer the roads from the surrounding urban textures. And lastly, a detailed parking lot texture is present for the Texas Stadium parking lot.



## Scenery Comparison 2: Texas Stadium, Irving Texas (Actual Aerial Image)



Here is an aerial image of the actual Texas Stadium region. The Ultimate Terrain X screenshot is a very close match to reality.

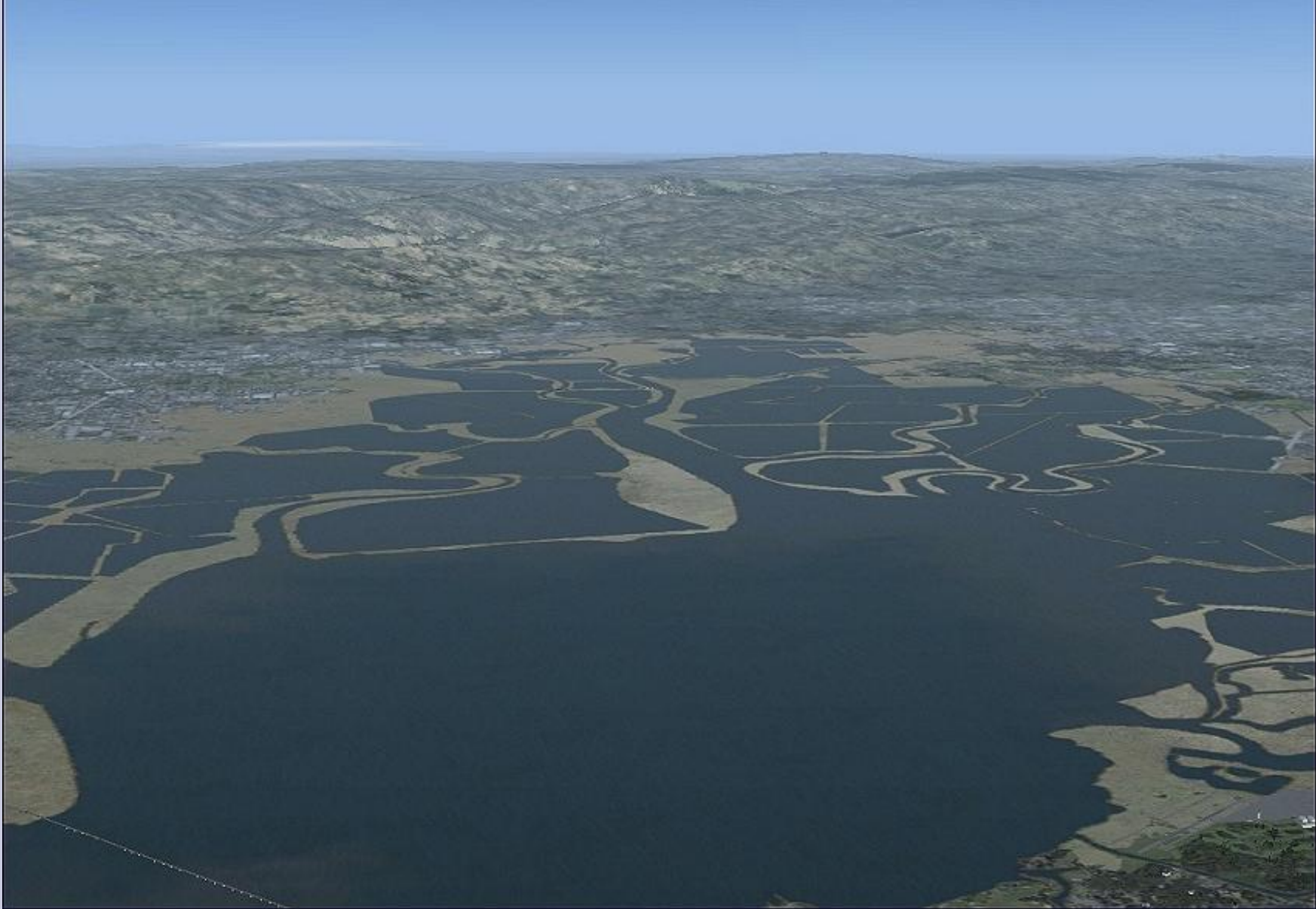
### Scenery Comparison 3: San Francisco Bay (FSX Without Ultimate Terrain X)



The south San Francisco Bay area before *Ultimate Terrain X*.



### Scenery Comparison 3: San Francisco Bay (FSX With Ultimate Terrain X)



For this portion of the San Francisco Bay area, *Ultimate Terrain X* contains lots of detailed evaporation ponds. The bay is displayed in a more appropriate water texture. The evaporation pond waterclass is more of a milky brown color. In the far background, you might also notice a more accurate positioning of the Fremont-San Jose urban areas.

## Scenery Comparison 4: Mobile Bay Causeway (FSX Without Ultimate Terrain X)



The Mobile Bay Causeway in Alabama is a well known region in the South. FSX does a good job of representing this area compared to prior MSFS versions. However, the water color for Mobile Bay and the Gulf Of Mexico is presented in FSX as a tropical region. The Gulf Of Mexico coloring is generally darker, with a green or even muddy brown tint.



## Scenery Comparison 4: Mobile Bay Causeway (FSX With Ultimate Terrain X)



*Ultimate Terrain X* gives you a choice of having a more accurate water color in this area. This image shows Ultimate Terrain X water with an Algae-Green tint. However, you can change this area to a muddy or blue tint if you desire. Also, the extrusion bridge objects and water features are slightly more accurate.

## Scenery Comparison 5: Downtown San Francisco (FSX Without Ultimate Terrain X)



Just outside downtown San Francisco at Dusk in FSX.



## Scenery Comparison 5: Downtown San Francisco (FSX With Ultimate Terrain X)



Just outside downtown San Francisco at dusk in FSX with Ultimate Terrain X. The landclass is set to a more appropriate Zero-lot housing texture instead of Hi-rise. The night lighting objects completely change the night scenery.



## Scenery Comparison 6: Mountain Lake And City (FSX Without Ultimate Terrain X)



A mountain lake area with missing city in FSX.



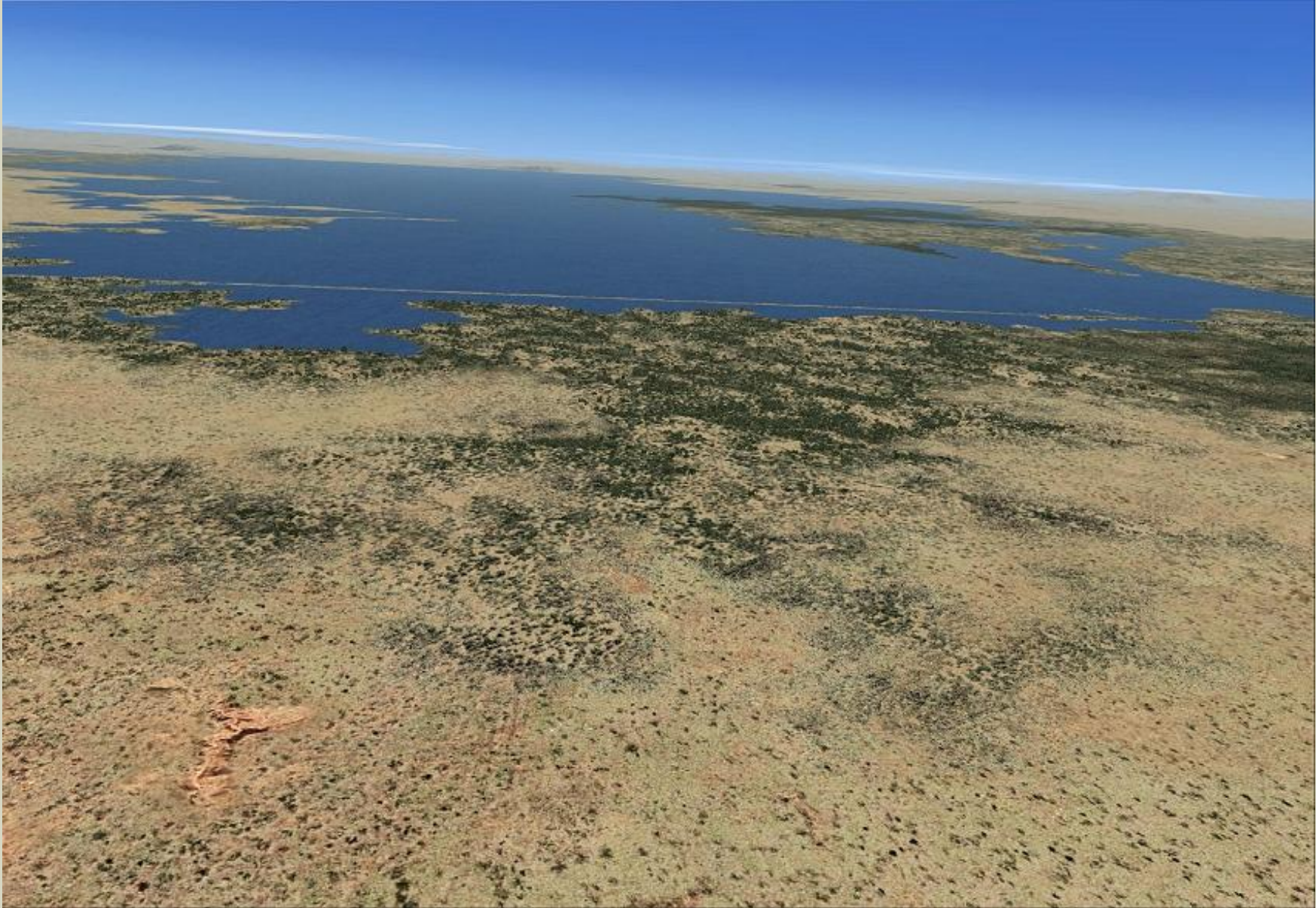
## Scenery Comparison 6: Mountain Lake And City (FSX With Ultimate Terrain X)



Same area with *Ultimate Terrain X*. Note the presence of city landclass, road encasements, highway interchange and concrete dam.



## Scenery Comparison 7: Desert Lake And City (FSX Without Ultimate Terrain X)



A desert lake area with missing city in FSX.



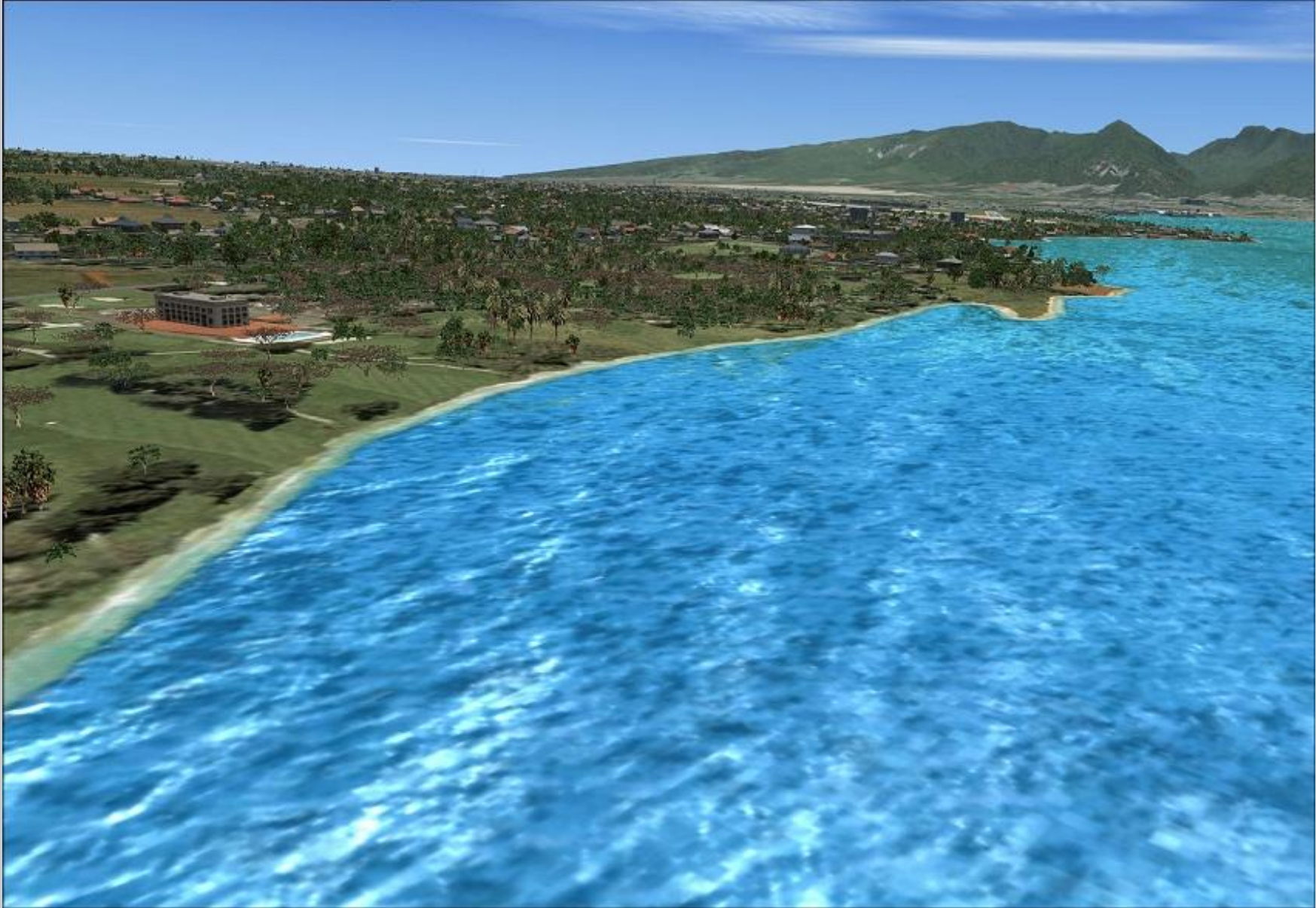
## Scenery Comparison 7: Desert Lake And City (FSX With Ultimate Terrain X)



Same area in *Ultimate Terrain X* with small city added. Also notice the more accurate detailed water features in the background.



## Scenery Comparison 8: Sandy Beach In Hawaii (FSX Without Ultimate Terrain X)



The FSX representation of a sandy beach in Hawaii.



## Scenery Comparison 8: Sandy Beach In Hawaii (FSX With Ultimate Terrain X)



Sandy beach in Hawaii with *Ultimate Terrain X* sand beach coastline and beach polygon..



## Scenery Comparison 9: City And Large River (FSX Without Ultimate Terrain X)



The FSX representation of a city and large river.



## Scenery Comparison 9: City And Large River (FSX With Ultimate Terrain X)



The *Ultimate Terrain X* representation of the same area. The city is present, with detailed coastlines, additional water features and a more appropriate water color.



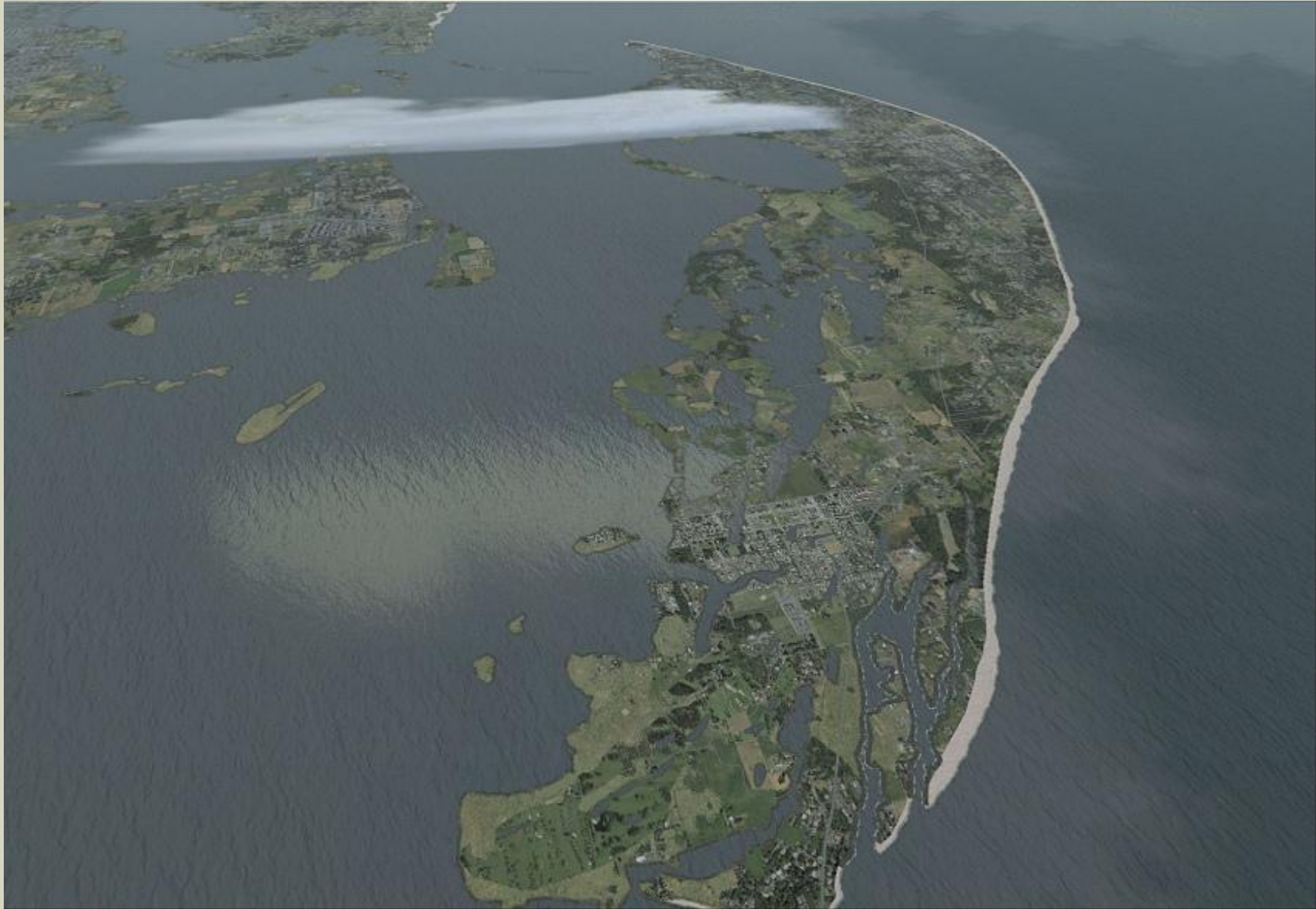
## Scenery Comparison 10: Mississippi Delta (FSX Without Ultimate Terrain X)



Detailed Mississippi delta in FSX.



## Scenery Comparison 10: Mississippi Delta (FSX With Ultimate Terrain X)



Same area with *Ultimate Terrain X*. Coastline precision is similar to FSX in this location. However, *Ultimate Terrain X* provides beach coastlines and a more appropriate water color. Also, there is a small urban landclass area on this island with *Ultimate Terrain X*.



## Scenery Comparison 11: Northern City (FSX Without Ultimate Terrain X)



A very nice screenshot of a northern city in FSX.



## Scenery Comparison 11: Northern City (FSX With Ultimate Terrain X)



Ultimate Terrain adds more appropriate urban landclass, a railyard and interchange areas to improve the city even further.



## Scenery Comparison 12: Major Urban Road Traffic (FSX Without Ultimate Terrain X)



FSX only adds traffic to freeways. Highways and major roads, as shown here, will not display any moving traffic.



## Scenery Comparison 12: Major Urban Road Traffic (FSX With Ultimate Terrain X)



*Ultimate Terrain X* adds traffic to freeways, highways and all major roads, including undivided road support. Traffic is now much more spread out and realistic.

# Final Words

We know you have lots of choices when it comes to Flight Simulation scenery products.

We hope this slideshow provides you with a good preview of many of the features in our new *Ultimate Terrain X* product line.



2006 Flightsim.com  
Armchair Aviator Award  
Ultimate Terrain Europe

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2006 Bravo Zulu Award  
Reader's Choice - Best Commercial Scenery Or Mesh  
Ultimate Terrain USA

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2006 simFlight Awards  
Best Scenery - Larger Area  
Ultimate Terrain Series

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2005 Bravo Zulu Award  
Runner Up - Best Scenery  
Ultimate Terrain USA, Ultimate Terrain Canada/Alaska

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2005 simFlight Awards  
Best Scenery - Runner Up  
Ultimate Terrain USA



# Scenery Solutions

For Product Purchasing: <http://www.flight1.com>

Support And Product Information Forum: <http://www.simforums.com/forums>

Developer Website: <http://www.scenerysolutions.com>

Acknowledgements: Special thanks to Marc Widi, who provided many of the terrific screenshots used in this demo.

Coming Soon.....Look for our new *Ultimate Terrain X* products for Europe, Canada and Alaska.