

## Thank you

Thank you very much for choosing *Crest Ocean System* 3.2 for URP!

Please follow *@crest\_ocean* on Twitter for news and updates, and drop in to the Crest Discord server <https://discord.gg/g7GpjDC> to say hello!

Crest began life as open source software hosted here: <https://github.com/crest/crest-oceanrender>. This may be a useful resource for issue searching/posting, for looking at experimental development branches, looking at commit history for files, and misc.

**Note 1:** This is an early, preview version of Crest for URP. Please report any issues on the discord or on the GitHub page (links above).

**Note 2:** Unity 2019.3.x and URP 7.1.2 or later are required. The most recent version of each is recommended due to the large volume of fixes and improvements that Unity are making.

## Documentation

There is a getting started video available on YouTube here: [https://www.youtube.com/watch?v=TpJf13d\\_-3E](https://www.youtube.com/watch?v=TpJf13d_-3E).

Refer to *userguide.pdf* alongside this document for full documentation, including detailed setup steps.

## Support

There are a number of channels to get support. First and foremost, you can contact us directly via this email address: [huw.bowles@gmail.com](mailto:huw.bowles@gmail.com).

Another support channel is the *Crest* Discord: <https://discord.gg/g7GpjDC>.

Finally issues can be searched and posted on the *Crest* GitHub: <https://github.com/crest/crest-oceanrender>.

## Notes

- Some of the example scenes require configuring URP. An example configuration is provided at *Crest/CrestExampleURPAsset.asset*. See the *Crest* user guide setup instructions for details.
- Some of the example scenes require a new layer to be added to your project called Terrain. *Crest* is unable to add this layer to your project automatically, so it will throw an error if this layer is not found.
- Issue with URP and VR - refraction appears broken due to what seems to be a bug in URP (BoatAttack suffers from the same issue). See Issue #206 on the *Crest* GitHub.

- Custom sky assets may require their code to be added to the ocean shader for the fogging/scattering to work. The ocean shader *Ocean.shader* has a comment pointing out where such code may need to be inserted: "If you are using a third party sky package such as Azure, replace this with their stuff!". For additional info/discussion in the context of Azure[SKY] see Issue #62 on the *Crest* GitHub.

## Release Notes

### 3.2

- Add links to recently published videos to documentation
- Fixes for wave shape and underwater curtain on Vulkan
- Fix for user input to animated wave shape, add to shape now works correctly
- Fix for underwater appearing off-colour in standalone builds
- Fix garbage generated by planar reflections script
- Fix for invalid sampling data error for height queries
- Fix for underwater effect not working in secondary cameras
- Asmdef files added to make Crest compilation self-contained

### 3.1

- Made more robust against VR screen depth bug, resolves odd shapes appearing on surface
- Preview 1 of Crest URP - package uploaded for Unity 2019.3