FY21 RSM Mid-Year IPR



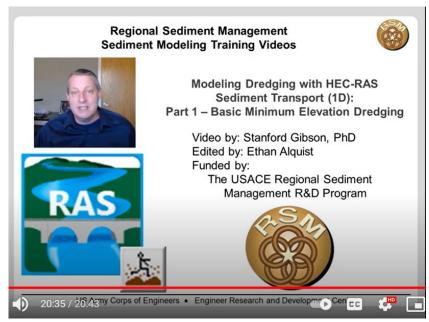


BLUF: Web videos are the preferred method tech-transfer medium for the emerging generation of USACE sediment modelers. This initiative will develop four(+) sediment modeling videos to help establish best-practices for common RSM applications of HEC-RAS.

Activities:

- 1. Video 1: Draft Published
 -Navigation Dredging Modeling in HEC-RAS
- 2. Video 2: Draft Published

 Aligning Mosh for 2D Sediment and Debris Me
 - -Aligning Mesh for 2D Sediment and Debris Model
- 3. Video 3: In Production
 -Hiding and Armoring Animation
- 4. Video 4: Survey
- 5. Bonus Videos:
 - -Four additional Sediment Modeling Videos -HEC-RAS 2D Modeling Class



FY21 RSM Mid-Year IPR Sediment Modeling Best Practice Videos: Stanford Gibson (HEC)

Video		Date ↓	Views	Comments	Likes (vs. dislikes)
Contract Sediment Date (Contract Sediment Date) Contract Sediment Date Contr	New Observed Sediment Data Capabilities Several of the HEC RAS manuals are now online (under various levels of construction):	Jan 15, 2021 Published	549	1	94.1% 16 likes
Agent shares have a series of the series of	Modeling Dredging with HEC-RAS Sedime This video describes some of the basic "minimum elevation" dredging approaches in	Jan 3, 2021 Published	916	6	100.0% 26 likes
20:03	HEC-RAS 2D Sediment Modeling HEC just released a beta version of HEC-RAS 6.0, which includes 2D sediment transport	Dec 23, 2020 Published	3,830	11	100.0% 89 likes
20:44	Align Cells with Flow Direction: HEC-RAS 2D Mesh Add description	Apr 11, 2021 Published	1,334	11	100.0% 36 likes

New Video

Total Stats: >6,700 Views, 179 "likes"

[Mary .		Published	130	2	100.0% 12 likes
	18.03	protect to reduce to results. It can do an are timig				

Video 3: Hiding and Armoring Animation



Video 4: Survey



https://forms.osi.apps.mil/Pages/ResponsePage.aspx?id=unZN_HzxUEy5p48xY9J1giyoWKt31PBGhSg1Yw5dJZ9URE01RFhGT1NVUVIBUIBFT1ZFRENNVTIPVS4u

	SM Sediment Modeling Video Survey
Hi S	stanford, when you submit this form, the owner will be able to see your name and email address.
1.	Which topic would you prefer for the final video?
	Advanced Dredging with HEC-RAS (mass based methods, spillage, downstream re-introduction features)
	Using Operational Rules to Simulate Reservoir Flushing
	Three Methods to Model Dams/Debris Basins Within a 2D Mesh
	Troubleshooting an HEC-RAS sediment Model: Resolving the "unrealistic vertical adjustment" error
2.	Are there other topics you'd be interested in a video on (that HEC is qualified to produce)?
	Enter your answer

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Links:



New Observed Sediment Data Capabilities...

Several of the HEC RAS manuals are now online (under various levels of construction):...



Modeling Dredging with HEC-RAS Sedime...

This video describes some of the basic "minimum elevation" dredging approaches in...



HEC-RAS 2D Sediment Modeling

HEC just released a beta version of HEC-RAS 6.0, which includes 2D sediment transport...



Align Cells with Flow Direction: HEC-RAS 2D Mesh Add description



HEC-RAS Sediment Plotter (Part 1): New 1D Sed...
HEC-RAS version 6.0 debuted a new sediment
plotter to visualize 1D results. It can do all the thing...

https://youtu.be/7muyCdZLjt4

https://youtu.be/Qgjm73NdAZE

https://youtu.be/NxXSPg6DVMo

https://youtu.be/oTfFdSmXbYQ

https://youtu.be/n9gwCx2J3fg

FY21 RSM IPR District, Title



What challenges did you face to get your project to implementation and how did you move past them?

Rendering/Computer Resources

FY21 RSM IPR District, Title



How is this project benefiting the USACE and Nation?

- Outreach Builds USACE and RSM technical brand
- Sediment transport modeling is hard, many models do not predict actual outcomes. COVID made live training difficult. Over 6,000 people accessed draft versions of these videos in <9 months. This will potentially avoid ill-posed designs and project failures due to avoidable modeling errors.