



Copyright B3 2019. All rights reserved. No part of this presentation may be reproduced, stored in a retrieval system or transmitted in any form or by any means, mechanical, electronic, photocopying, recording or otherwise with out the prior written permission of B3. For information, contact info@b3insight.com.

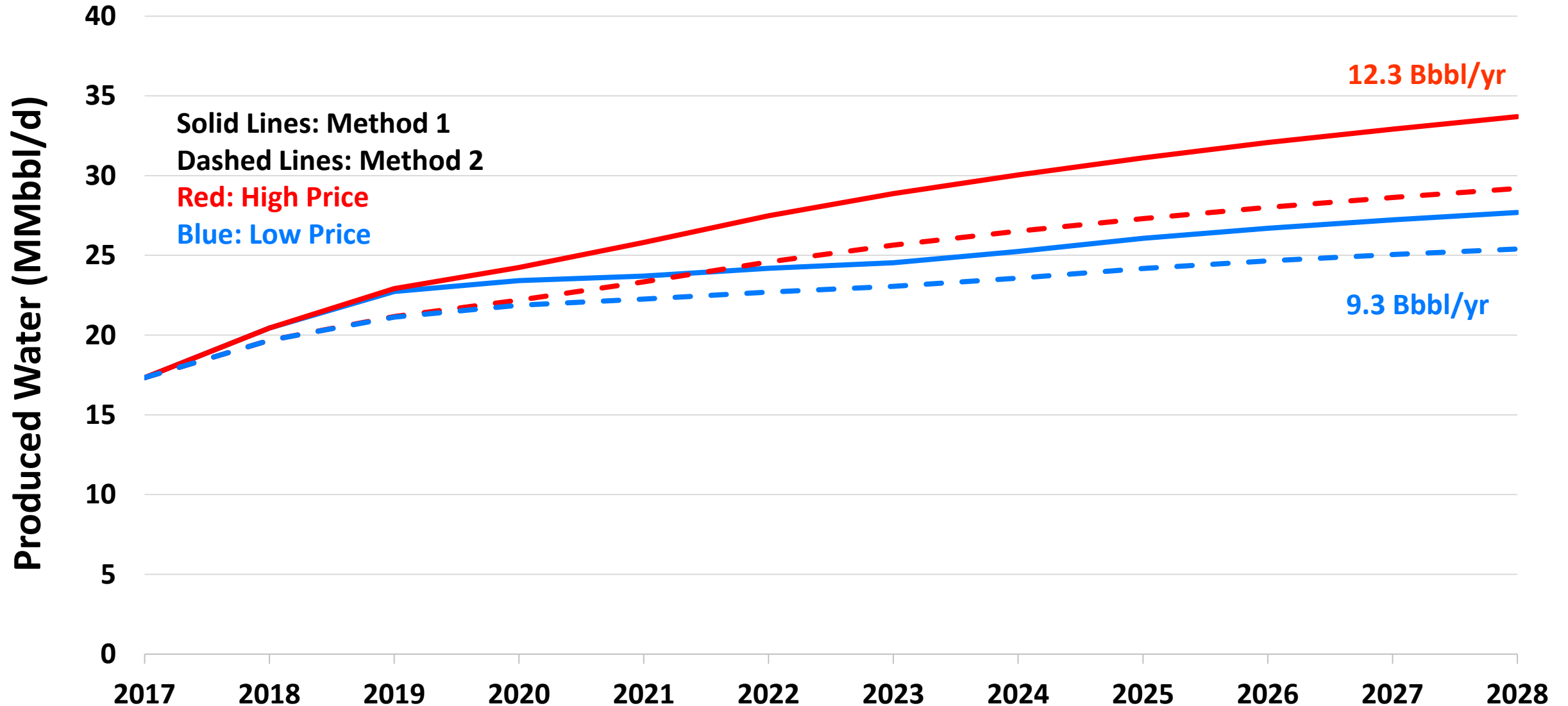


Permian Basin Petroleum Association Annual Meeting:

Water Use Panel
Oct. 24, 2019



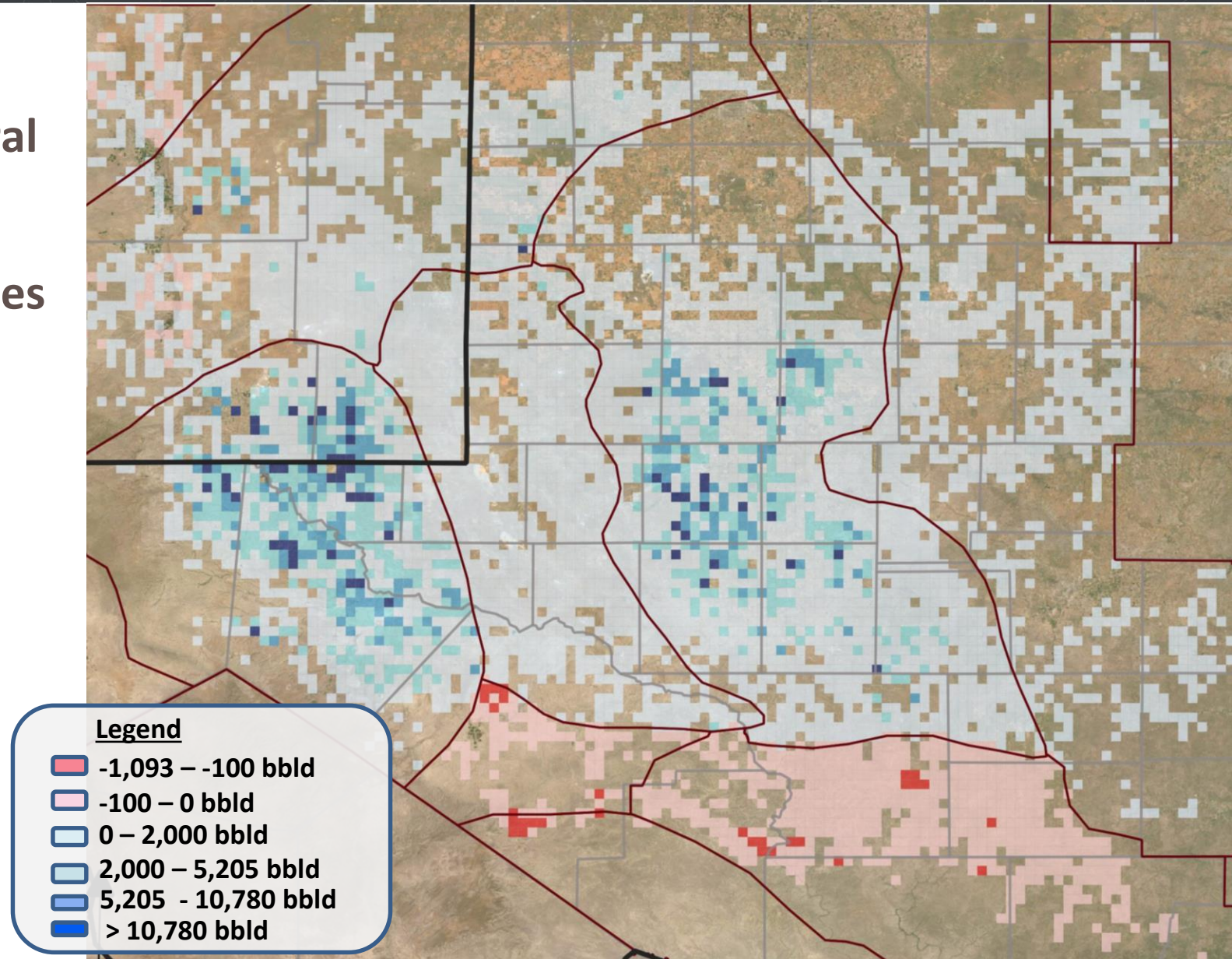
The Permian Growth Story: No Oil Without Water





Economics Will Drive Growth In Specific Areas

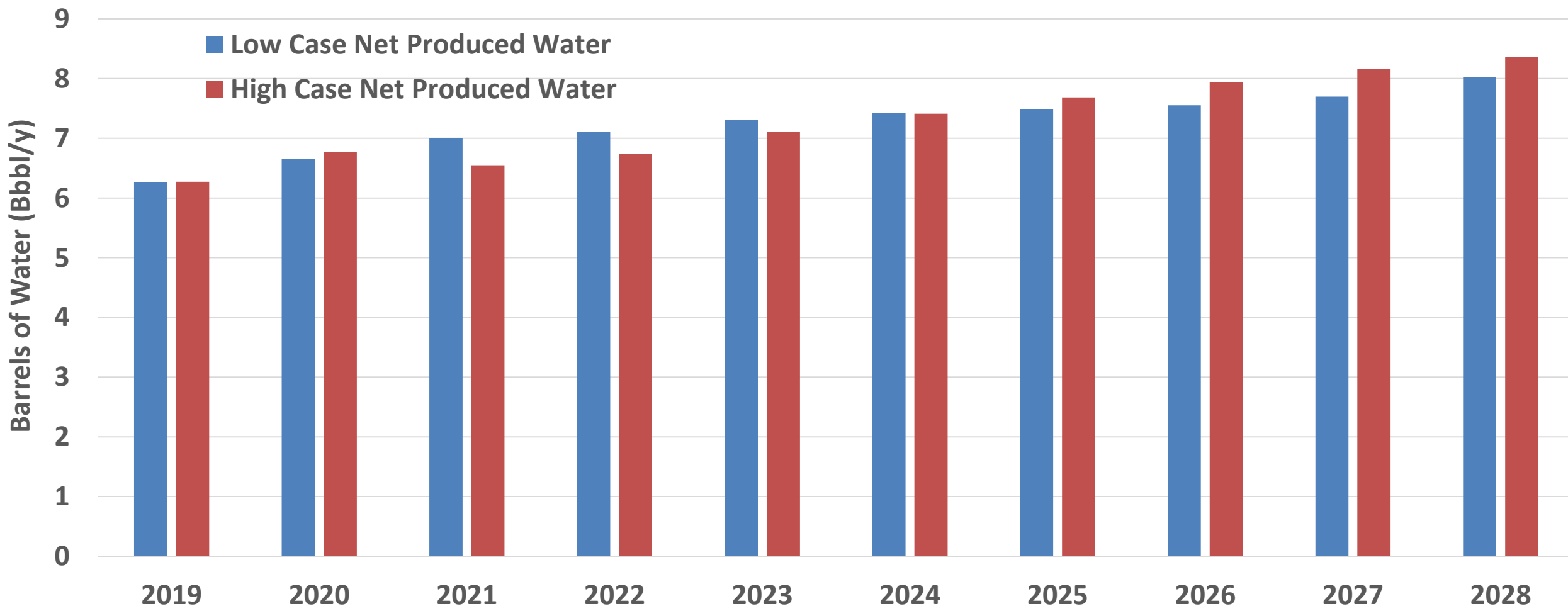
- Delaware Basin sub-area is central driver of Permian growth
- Demand for water-related services will align geographically
- Are water needs of future New Mexico production adequately served?





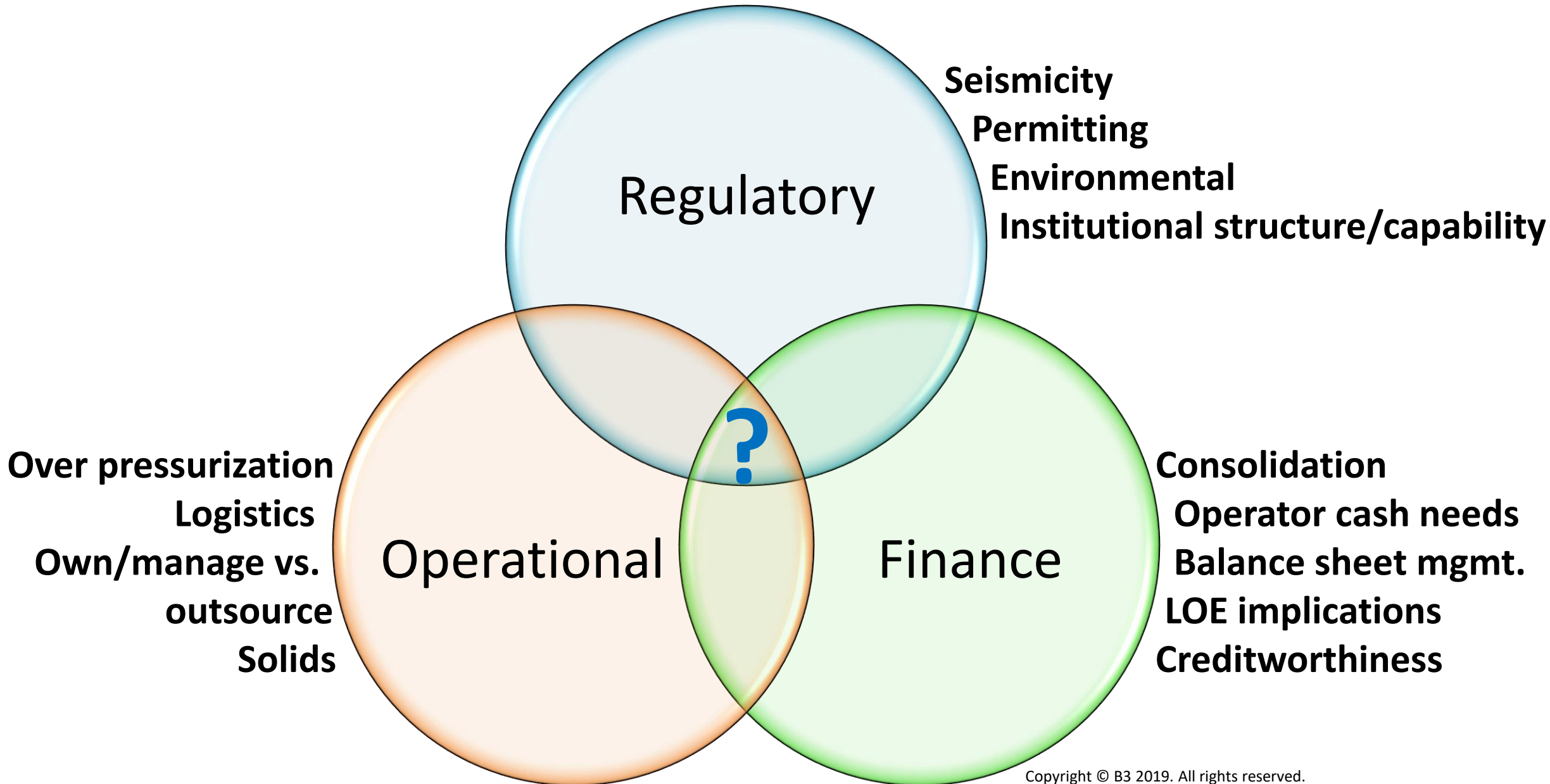
Reuse/Recycle Is A Pressure Valve, Not A Cure-All

Permian Net Produced Water Challenge (Total Production Minus Use)





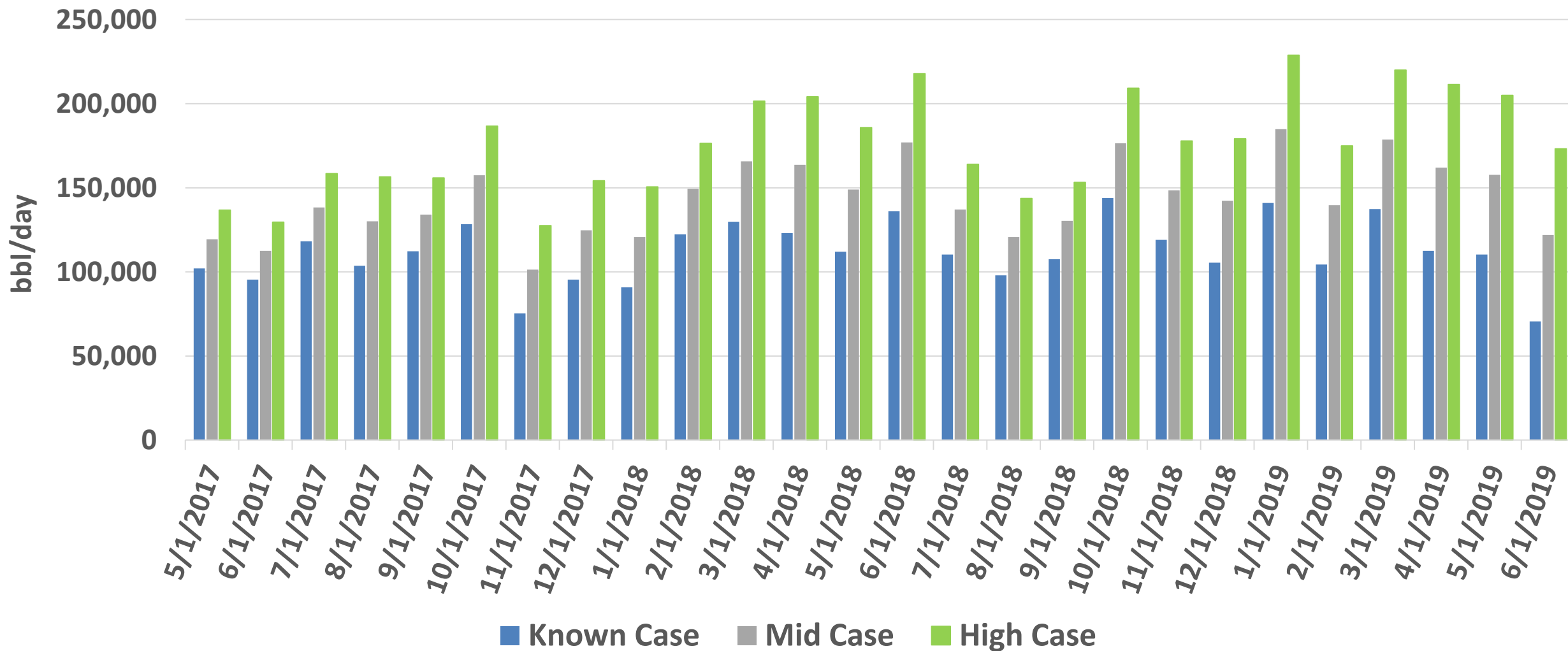
Uncertainty In Permian Water Is Multifaceted





New Mexico Production Depends On Texas Disposal

New Mexico Water Into Texas Disposal



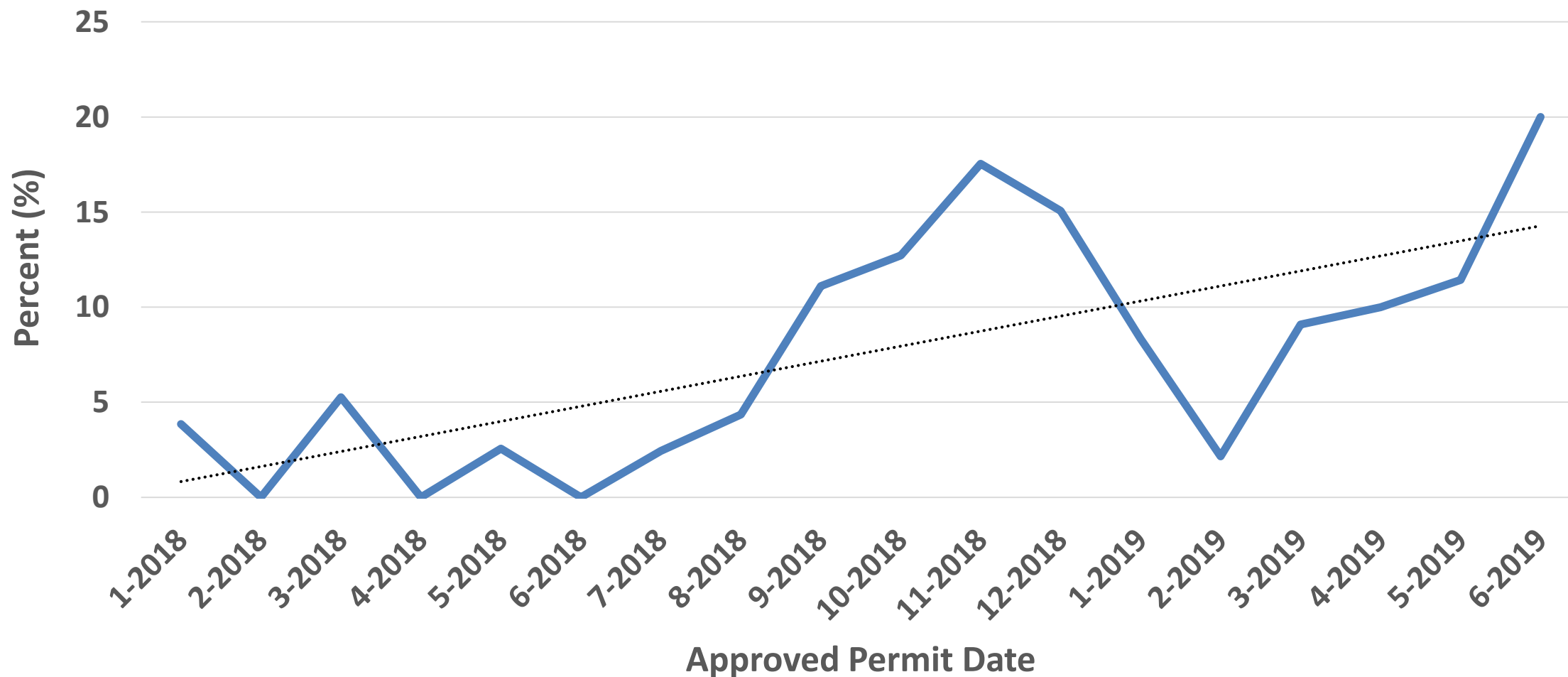


Kelly Bennett
B3 Insight
Denver, CO
kbennett@b3insight.com



Is Regulatory Policy Increasing Disposal Costs?

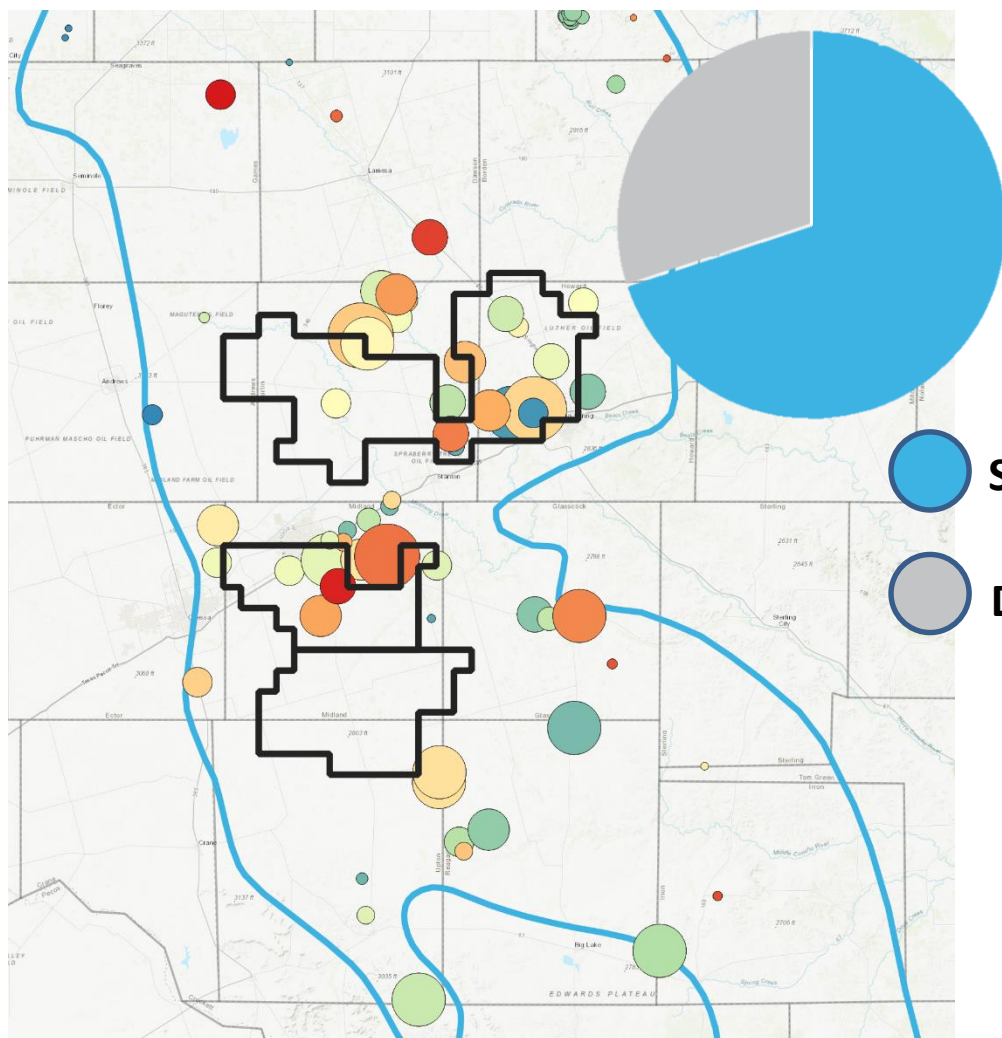
Percentage Of TX Permian Disposal Wells Approved With Injection Capacity Reduced During Permitting Process



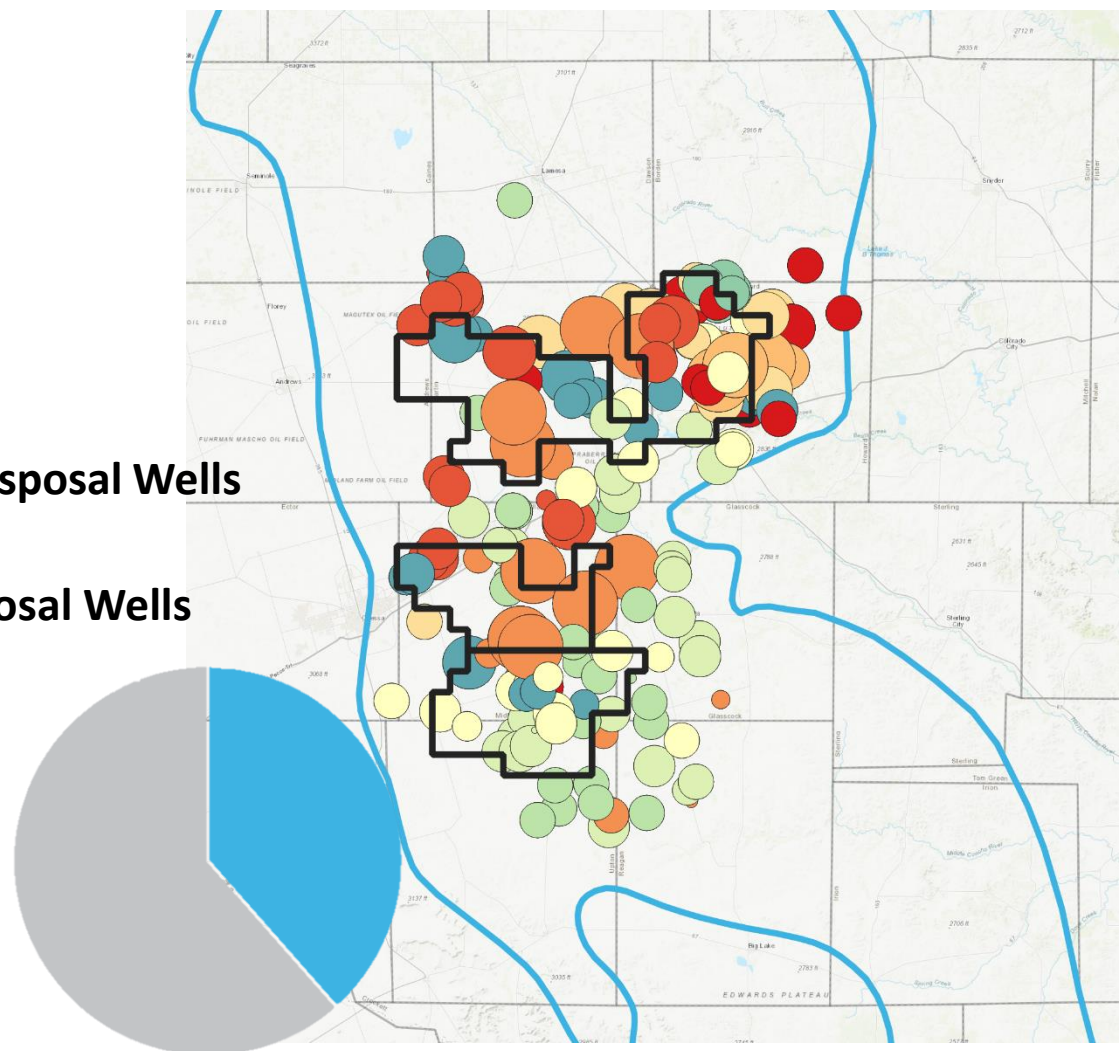


Midland Disposal Development Shows Very Different Approaches, Depending On Operator

Operators with Less than 10 Approved Disposal Wells – sized by injection Volume



Top 10 Operators with more than 80 Approved Disposal Wells – sized by injection Volume





UIC Permitting Days Elapsed Vs RADLTR Distribution

