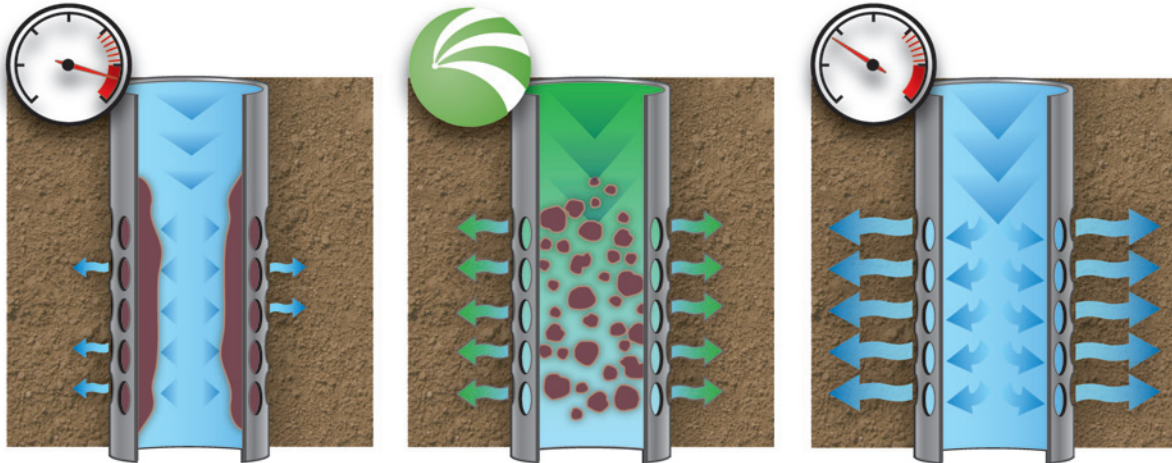


# EnovaFlow™ Waterflood Injection Wells



## Maintain Injection Rates. Meet Production Goals.

Waterflooding is the most widely applied method for improved oil recovery. This technique accounts for more than one-half of U.S. domestic oil production. Several issues can occur at the wellbore/reservoir interface which may impede the injection of fluids into waterflood wells. EnovaFlow reverses impeded flow due to blockage at the well bore caused by common skin damage mechanisms including:

- Asphaltene
- Hydrocarbon Carryover
- Changes in Wettability
- Paraffin
- Inorganic Scale
- Emulsion Block

EnovaFlow's proprietary technology simultaneously addresses these issues. It increases injection rates and/or decreases injection pressures.

## Scalable to Your Needs

EnovaFlow's proprietary program is scalable. It may be implemented on a single well, as a pilot program, or as a comprehensive injection well maintenance program.

### Features:

- Cleans the well bore, opens flow channels and improves near wellbore permeability
- Provides a persistent surfactant action
- Restores wellbore/reservoir interface (e.g. repairs "skin damage")
- Reduces interfacial forces

### Benefits:

#### Keep It Injecting

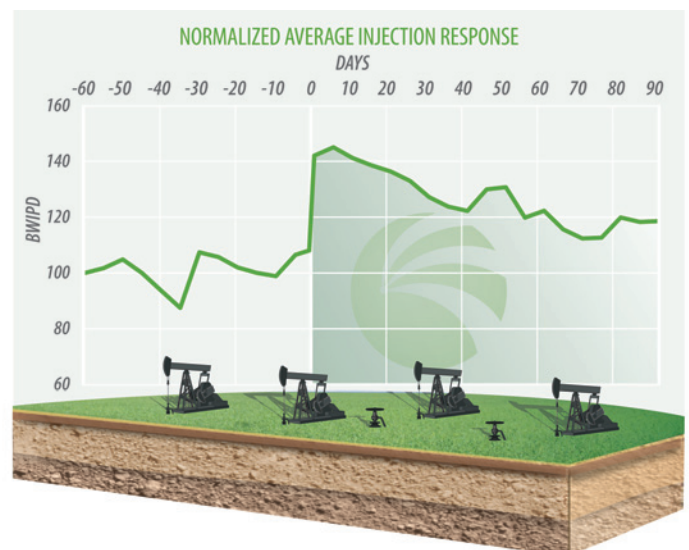
- Avoid shut downs or having to drill replacement injection wells
- Maintain or increase injection rates on wells treated
- Monitor wells and adjust program as needed
- Preventative disposal maintenance

#### Superior ROI

- 25% proven average incremental increase in injection rates
- Treatment response effective for 3–6 months
- Minimal down time for treatment (2–4 hours)
- Less complex, simultaneous treatment approach

#### Play it Safe

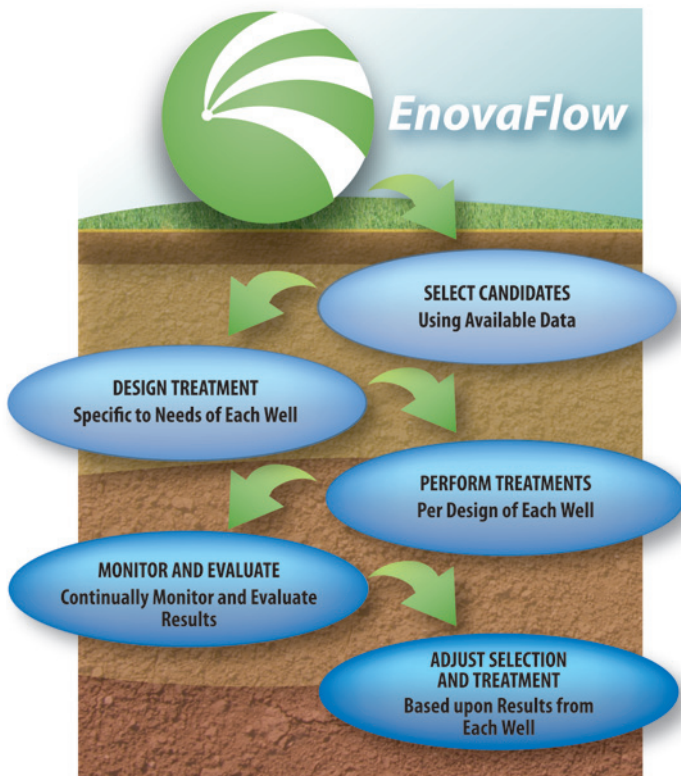
- Maintain injection pressure compliance
- Fully compatible with your injection systems and downhole equipment
- "Minimal footprint" on your location reducing safety exposure



**Sustained Increase in Injection Rates:** EnovaFlow for Waterflood Injection Wells substantially increased injection rates for over 3 months while keeping injection pressure within regulatory requirements.

# The unique EnovaFlow Process

**The strength of the EnovaFlow approach is based on the combination of our structured process and proprietary solutions.**



**The Steps in Our Unique EnovaFlow Process**

## **Because time is money.**

The EnovaFlow process generates an average 25% increase in injection rates on treated wells. The actual time for the treatment process is a brief 2-4 hours, getting your wells back on-line quickly. Wells that respond to treatment are shown to have consistent or increased injection rates for 3-6 months. We analyze the data you collect on your wells, evaluate treatment response and design future treatments for maximum results.

## **EnovaFlow. Technically speaking.**

Our team designed this proprietary technology to remove asphaltenes, paraffin, and mineral accretions in the flow channels of the rock in the near well bore region. The base proprietary technology is adjusted for the unique requirements of your well conditions.

EnovaFlow's technology acts as a persistent surfactant in very low concentrations. It is a powerful emulsion modifier that can function as an emulsion breaker. EnovaFlow can actually break through oil/water barriers and improve relative permeability to oil (e.g. improve wettability).

EnovaFlow also repairs "skin damage" problems while opening the near wellbore with a safe and effective treatment.

## **Impact production, not your operations.**

EnovaFlow increases injection rates by an average of 25% for 3-6 months on treated wells. The EnovaFlow approach has minimal impact on your operations and your team's resources. Our team works with you to analyze your data and develop and adjust treatment programs leveraging your valuable time. Decreased time on site and a small footprint mean reduced exposure on the job site. This treatment will not precipitate damaging substances of any kind or lead to any additional blocking problems.

**EnovaFlow keeps your injector wells on-line and avoids shut-ins. Meaning you can meet production goals from your producing wells.**

**To get more information on how to make your wells more productive call or visit us online...**



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