



Economic and Social Impacts of PFAS on Farming Communities

Identifying and Prioritizing Research and Programmatic Needs in the Detection,
Mitigation, and Remediation of PFAS in Agriculture and Food Systems
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Economic and Social Impacts of PFAS

- Discovery of PFAS
- Economic
 - Financial
 - Land
- Social
 - Physical Health
 - Mental Health

Suspicion of PFAS Contamination

- How does the producer learn about the potential presence of PFAS?
- What is the lag time between initial awareness and confirmatory test results?
- What do they do in the interim?
 - Continue to sell?
 - Who do they tell?

Confirmed PFAS Contamination

Pressing need for answers:

- How to read and interpret a lab report
- Technical assistance informed by research
 - * Need research on testing methodologies

Economic Impact: Financial Needs

- **INCOME REPLACEMENT**
- Water filtration
- Testing
- Depopulation
- Administrative cost grants
- Clean feed
- Equipment and inputs
- Infrastructure
- Professional and technical services
- Loan assistance: servicing & obtaining

Economic Impact: \$\$\$ to Maine Farms

- PFAS Response Program, > \$3.3M from 2022 – July 2024
 - Income replacement: \$1,906,2278
 - Farm infrastructure and viability payments: \$1,061,339
 - Livestock depopulation compensation: \$265,684
 - Water filtration support: \$96,059
- PFAS Fund, ~ 2.25M, March 2024 – present
 - Income replacement: \$2,174,513
 - Administrative cost grants: \$45,786
 - Business planning: \$20,258
 - Professional services: \$11,700

Economic Impact: Land

What to do with PFAS-impacted land?

- Depending on the amount of contamination, some crops can be produced safely
- Leave fallow
- Sell: PFAS Fund will purchase at FMV as if not contaminated
- Solar development
- Need more options:
 - Conservation Reserve Enhancement Program (CREP)?
 - ACEP-ALE?

Social Impact: Physical Health

Potential adverse health effects, especially in sensitive populations, in persons with PFAS blood levels between 2 and 20 nanograms per milliliter (ng/mL), and an increased risk of adverse effects at PFAS blood levels over 20 ng/mL.

National Academies of Sciences, Engineering, and Medicine (NASEM)

Social Impact: Physical Health

Health effects potentially associated with PFAS exposure include increases in cholesterol levels, decreases in birth weight, lower antibody response to vaccines, kidney and testicular cancer, pregnancy-induced hypertension, preeclampsia, and changes in liver enzymes.

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)

Social Impact: Physical Health

Impacted farmers and farm workers need access to PFAS blood serum testing.

Shared decision making between an individual and their medical provider based on exposure history.

Social Impact: Mental Health



Social Impact: Mental Health

Supportive services:

- One-on-one counseling
- Trained peer support network
- Web-based resources
- 24/7 hotline
- Trainings for agricultural service providers

Speaking of research . . .

Maine DACF PFAS Fund: Major Grants for the Study of PFAS in Agricultural Systems

Priorities:

- Soil, water, and plant studies
- Animal and animal product studies
- Understanding and managing PFAS on farms
- Remediation of PFAS-contaminated land and suitable uses of PFAS-contaminated agricultural land and products



Thank you

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<https://www.maine.gov/dacf/ag/pfas/index.shtml>