Washington state is enjoying the second-biggest apple crop in its history, but farmers warn they may have to leave up to one-quarter of their bounty to rot, because there aren’t enough pickers.

“I’m down 40 percent from the labor I need,” said Steve Nunley, manager of a 3,000-acre apple orchard for Pride Packing Co. in Wapato, Wash. Mr. Nunley said he has 200 pickers right now, but needs close to 400. He has increased pay to $24 for every 1,000-pound bin of Gala apples they pick, compared with $18 last year. Even so, he expects to have to let tons of fruit fall unpicked this season.

Washington’s bumper crop, forecast at 109 million boxes of Red Delicious, Gala, Granny Smith and other varieties, comes as drought and poor growing conditions have led to dismal harvests in parts of the U.S. Michigan lost much of its apple crop this year, and poor conditions have depressed the yields in New York state and North Carolina.

But Washington’s farmers can’t fully cash in on their good fortune. The national crackdown on illegal immigration has shrunk the pool of potential farm workers in the state, while at the same time, the modest economic rebound has given immigrants more opportunities than before in construction, landscaping and restaurants.

In a standoff, growers say they can’t afford to raise wages further, and workers decline to work for what they’re being offered.

“We could lose 25% [of the crop]. Or it could be much worse,” said Jeff Rippon, farm manager of Chiawana Orchards in Yakima, Wash. Mr. Rippon’s 300 acres have enough apples on them to yield nearly 10 million pounds of fruit, if he had enough hands to bring them in. He said he needs about 150 full-time pickers to get the crop in, but right now has only 60.

“Pickers pull up, they ask what you’re paying. If they like what you’re offering, they stay. If they don’t, they’re gone,” said manager Martin Estrada of Monkey Ridge Ranch, a huge apple plantation on the Snake River.

Monkey Ridge has raised its picking price for filling a 1,000-pound bin to $28 from $22 a year ago, he said. An experienced laborer can pick as much as a bin an hour, growers said.

The labor shortage affects many fruit and vegetable crops in Washington, but apples are the state’s top farm commodity, generating about $7 billion annually and supporting nearly 60,000 jobs in growing and processing, according to the Washington Apple Commission. The state’s growers have rapidly expanded capacity to their orchards in recent years, contributing to 2010’s record crop of 110 million boxes, at the same time that growth in the labor pool has stagnated.
The state faced similar labor shortages last year, when growers persuaded Democratic Gov. Christine Gregoire to declare a labor emergency, which allowed farms to hire prisoners to bring in the harvest. For example, about a hundred convicts from a minimum-security facility fanned out among orchards in the Wenatchee Valley. But growers aren’t currently seeking to hire prisoners, who pick far fewer apples a day than immigrant laborers do.

Farm operators elsewhere in the U.S. have said they face shortages of workers, sometimes because of new state immigration laws that have driven pickers from fields and groves. Some academic researchers say it is hard to quantify an actual labor shortage in U.S. agriculture, in part because there is so little evidence of a decline in production.

Philip L. Martin of the University of California, Davis, said overall U.S. production of fruits and vegetables has remained stable in recent years. Moreover, he said, farm-labor wages have remained flat or even declined. “You would think that wages would go up” if workers were in short supply, he explained.

United Farm Workers organizer Jorge Antonio Valenzuela, who represents pickers in the Northwest, said “there is no shortage” at farms that pay “correctly.”

The shortage could worsen. Growers’ yields are soaring, thanks to hardier new varieties and more sophisticated growing methods. Industry experts say Washington has the potential to boost its apple harvest to 130 million boxes annually, about 35% more than the harvests the state reported as recently as a decade ago.

Jim Hazen, the business manager at Broetje Orchards in Prescott, Wash., declined to guess what portion of his company’s crop of more than 300 million pounds might not get picked before the first frost. He calculated that he is nearly 200 workers short of what he needs, but hopes mild weather will hold into November and allow more time to get fruit in.

Not far away, outside a church in Pasco, a migrant from Mexico’s Michoacán state, 47-year-old José Carranza, said he planned to skip the fruit harvest this year. Mr. Carranza believes he can do better in construction work, which is picking up.

“Growers offer $20 per bin around here,” he said. “It’s just not enough.”